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Vol. VI

TRANSCRIPT OF RECORD

Supreme Court of the United States

OCTOBER TERM, 1938

No. 27

**THE TENNESSEE ELECTRIC POWER COMPANY,
ET AL., APPELLANTS,**

.vs.

**TENNESSEE VALLEY AUTHORITY, ARTHUR E.
MORGAN, HARCOURT A. MORGAN AND DAVID
E. LILIENTHAL**

**APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR
THE EASTERN DISTRICT OF TENNESSEE**

FILED APRIL 18, 1938.

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VOLUME VI

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920—A table showing the farm census data for Alabama as of January 1, 1935.....	3997	3953
921—A table prepared by the Statistical Department of the Edison Electric Institute stating certain figures concerning rural electrification in the United States	3998	3954
922—A letter dated January 8, 1938, to the Alabama Power Company from the Rockwood Alabama Stone Company [omitted]	3999	3955

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.	Original	Print
923—Water control bulletins Nos. 1 to 9 inclusive	4000	3955
924—Papers designated as water control memorandum Nos. 1 to 24 inclusive, the first one being dated July 27, 1937, and the last one being dated December 31, 1937	4007	3961
925—Map prepared by the Tennessee Valley Authority Project Planning Division entitled "Tennessee River Plan and Profile Existing and Proposed High Dams" (original exhibit) [omitted]	4019	3973
926—Table entitled "Tennessee Valley Authority Tabulation of Principal Features of Present and Proposed Dam and Reservoir Projects September 29, 1937"....	4020	3974
927—Chart entitled "Tennessee Valley Authority Proposed Program of Dam Construction"	4021	3974
928—The original power contract between TVA and the City of Florence, dated March 12, 1934	4022	3975
929—The original power contract between TVA and the City of Tusculumbia, dated March 14, 1934	4029	3980
930—The original power contract between TVA and the City of Sheffield, dated March 14, 1934	4030	3981
931—Subpoena duces tecum for report of United States Department of the Interior, Bureau of Reclamation, entitled, "Economic Height of Norris Dam," by E. B. Debler, Hydraulic Engineer, dated November 1, 1933	4031	3982
932—Table entitled "Comparative Lockage Times per Lock (no allowance for open river navigation)"	4032	3982
933—A diagram entitled "Coal Transfer and Transit Facilities" at Norris Dam (original exhibit) [omitted].....	4033	3983
934—A table showing the gross hydro plant generation in kwh. of the Alabama Power Company at Lay Dam, Mitchell Dam, Jordan Dam, Martin Dam, Upper Tallassee Dam and Thurlow Dam for the years 1932 to 1936.....	4034	3984
935—A table entitled "Comparative Lockage Times—Tennessee River"	4035	3984
936—House Document 306, 74th Congress, First Session (original exhibit) [omitted]...	4036	3985

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
937—Four sheets showing the proposed subscribers on Highway No. 15 near Fayetteville, Tennessee, and the amount subscribed by each.....	4037	3986
938—A report labeled "Memorandum Covering Proposed Electric Service to Elora, Tennessee, Flintville, Tennessee, U. S. Government Fish Hatchery in Warren Hollow, Kelso, Tennessee".....	4041	3987
939—A letter dated November 10, 1932, to Mr. Joe C. Guild, Jr., from Malcolm R. Williams enclosing a letter to Mr. Williams dated September 27, 1932, from Charlie Beatty	4045	3991
940—A report of the district engineer entitled "Memorandum as to the feasibility of extending a 2300 volt single phase line from Fayetteville to serve the communities of Kelso, Flintville and the U. S. Government Fish Hatchery".....	4047	3993
941—A tabulation of floods which have occurred between April 15 and November 30 on rivers in and near the Tennessee River basin	4048	3994
942—A table and a chart showing the weekly loads of the Complainant Companies for the year 1937.....	4050	3996
943-953, Inc.—Certificates of Incorporation of Mississippi Rural Cooperative Organizations	4051	3996
954—A subpoena duces tecum for material on pages 7, 8, 9, 10, 11, 14, 15, 30, 31 and 32, submitted to Congress by TVA in December, 1937	4058	4002
955—A subpoena duces tecum for TVA's detail statement of budget estimates for the fiscal year ending June 30, 1939, submitted to Congress in December, 1937..	4059	4003
956—A subpoena duces tecum for minutes of the board of directors of the TVA approving the recommendations or reports relating to the methods of operating Norris, Wheeler or any other TVA dam or prescribing levels at any of the reservoirs at said dams.....	4060	4004
957—Resolutions of TVA Board of Directors dated October 26, 1936, March 12, 1937, March 31, 1937, May 5, 1937, and June 3, 1937, relating to water control bulletins	4061	4004

[fol. 3139] COMPLAINANTS' EXHIBIT No. 632 (Excluded)

Alabama Power Company

Annual Payments to United States on Account of Licenses Issued by Federal Power Commission by Projects

Year	Mitchell Dam— Project 82. License Issued 6-27-21	Martin Dam— Project 349 Unit #4. License Issued 6-9-23	Jordan Dam— Project 618. License Issued 11-7-25	Total
1921	\$225.45	.....	.....	\$225.45
1922	437.70	.....	.....	437.70
1923	437.71	\$190.86	.....	628.57
1924	1,193.00	576.61	.....	1,769.61
1925	2,281.00	755.00	\$91.62	3,127.62
1926	5,545.00	755.00	608.00	6,908.00
1927	5,545.00	1,887.50	608.00	8,040.50
1928	5,545.00	3,775.00	608.00	9,928.00
1929	5,545.00	9,437.50	1,520.00	16,502.50
1930	5,545.00	9,437.86	3,040.00	18,022.86
1931	5,545.00	9,437.59	7,624.99	22,607.58
1932	5,545.00	9,437.59	7,608.33	22,590.92
1933	5,545.00	9,437.59	7,608.33	22,590.92
1934	5,545.00	9,437.59	7,608.33	22,590.92
1935	5,545.00	9,437.59	7,608.33	22,590.92
1936	5,545.00	9,437.59	7,608.33	22,590.92
Total	\$65,569.86	\$83,440.87	\$52,142.26	\$201,152.99

[fol. 3140] COMPLAINANTS' EXHIBIT No. 633 (Excluded)

The Power Policy of the Tennessee Valley Authority

1. The business of generating and distributing electric power is a public business.

2. Private and public interests in the business of power are of a different kind and quality and should not be confused.

3. The interest of the public in the widest possible use of power is superior to any private interest. Where the private interest and this public interest conflict, the public interest must prevail.

4. Where there is a conflict between public interest and private interest in power which can be reconciled without injury to the public interest, such reconciliation should be made.

5. The right of a community to own and operate its own electric plant is undeniable. This is one of the measures

COMPLAINANTS' EXHIBIT No. 633 (Excluded)

which the people may properly take to protect themselves against unreasonable rates. Such a course of action may take the form of acquiring the existing plant, or setting up a competing plant, as circumstances may dictate.

6. The fact that action by the Authority may have an adverse economic effect upon a privately-owned utility, should be a matter for the serious consideration of the Board in framing and executing its power program. But it is not the determining factor. The most important considerations are the furthering of the public interest in making power available at the lowest rate consistent with sound financial policy, and the accomplishment of the social objectives which low cost power makes possible. The Authority cannot decline to take action solely upon the ground that to do so would injure a privately-owned utility.

7. To provide a workable and economic basis of operations, the Authority plans initially to serve certain definite regions and to develop its program in those areas before going outside.

8. The initial areas selected by the Authority may be roughly described as:

(a) The region immediately proximate to the route of the transmission line soon to be constructed by the Authority between Muscle Shoals and the site of Norris Dam.

(b) The region in proximity to Muscle Shoals, including northern Alabama and north-eastern Mississippi.

(c) The region in the proximity of Norris Dam (the new source of power to be constructed by the Authority on the Clinch River in north-east Tennessee).

[fol. 3141] At a later stage in the development it is contemplated to include, roughly, the drainage area of the Tennessee River in Kentucky, Alabama, Georgia and North Carolina, and that part of Tennessee which lies east of the west margin of the Tennessee drainage area.

To make the area a workable one and a fair measure of public ownership, it should include several cities of substantial size, (such as Chattanooga and Knoxville) and, ultimately, at least one city of more than a quarter million,

COMPLAINANTS' EXHIBIT No. 633 (Excluded)

within transmission distance, such as Birmingham, Memphis, Atlanta, or Louisville.

While it is the Authority's present intention to develop its power program in the above-described territory before considering going outside, the Authority may go outside the area if there are substantial changes in general conditions, facts, or governmental policy, which would necessarily require a change in this policy of regional development, or if the privately-owned utilities in the area do not cooperate in the working out of the program.

Nothing in the procedure here adopted is to be construed in any sense a commitment against extending the Authority's power operations outside the area selected, if the above conditions or the public interest require. Where special considerations exist, justifying the Authority going outside this initial area, the Authority will receive and consider applications based on such special considerations. Among such special considerations would be unreasonably high rates for service, and a failure or absence of public regulation to protect the public interest.

9. Every effort will be made by the Authority to avoid the construction of duplicate physical facilities, or wasteful competitive practices. Accordingly, where existing lines of privately-owned utilities are required to accomplish the Authority's objectives, as outlined above, a genuine effort will be made to purchase such facilities from the private utilities on an equitable basis.

10. Accounting should show detail of costs, and permit of comparison of operations with privately-owned plants, to supply a "yard-stick" and an incentive to both private and public managers.

11. The accounts and records of the Authority as they pertain to power, will always be open to inspection by the public.

[fol. 3142] COMPLAINANTS' EXHIBIT No. 634 (Excluded)

Tennessee Valley Authority
Temporary Building F, Washington

For Release to Afternoon Papers, Thursday, September 14,
1933

Electric Rates Announced

The following statement respecting rates for electric power from the publicly-owned plant at Muscle Shoals was made today by David Lilienthal, member of the Board of Directors of the Tennessee Valley Authority to whom has been assigned the execution of the Authority's power program.

"At the direction of the Board of Directors of the Tennessee Valley Authority, rates for electricity supplied from the publicly-owned plant at Muscle Shoals have been formulated, after weeks of careful study of costs and market factors.

"Any municipality, in the area we plan to serve initially, which owns its distribution system, assuming half-time use, may secure wholesale power from the Authority at an average cost to it of seven mills a kilowatt hour. We propose that our municipal wholesale customers charge the individual residence consumer in the towns and cities thus served a maximum gross rate of 3 cents a kilowatt hour for the first block, and for subsequent blocks 2 cents, 1 cent, and 4 mills. For the typical general consumer this is an average of about 2 cents a kilowatt hour, and for the typical limited user an average of about 2¾ cents. For a fully electrified home—which is our objective—the rate would average 7 mills per kilowatt hour.

"The farm user, we propose, should pay the same rate for energy as the town and city householder. These schedules, both for town and farm, carry with them a requirement that the customer use a reasonable amount per month as a minimum. These minimum requirements vary, both in urban and farm territory, with the size of the customer's meter. Farm users will have a larger minimum requirement wherever the greater distances between customers result in increased cost of service.

COMPLAINANTS' EXHIBIT No. 634 (Excluded)

"These wholesale rates have been computed on a conservative basis to cover all the costs of furnishing the service, including operation, maintenance, depreciation, and taxes. In addition to these costs, we have made provision for interest and retirement, although such provision is not required by the Tennessee Valley Authority Act. The power project is designed to be strictly self-supporting and self-liquidating.

"We believe that these low rates will mean that the people of the Valley will greatly increase their use of electricity—which is one of the objectives of the President and Congress. [fol. 3143] If this occurs, even lower rates can be planned for the future.

"The proposed rates to the householder and farmer should be explained in more detail. Under the rate for domestic service, it is proposed that for the first 50 kilowatt hours which the householder uses he shall pay 3 cents a kilowatt hour. These 50 kilowatt hours, in the ordinary small or medium sized house, would care for the lights and small electrical appliances, such as the flat iron, toaster, percolator, vacuum sweeper, washing machine, and similar small devices. For these 50 kilowatt hours the user would pay \$1.50. If the consumer has an electric refrigerator and an electric range which together consume 200 kilowatts, 150 of these kilowatt hours per month, he would get for 2 cents per kilowatt hour, and the remaining 50 kilowatts at 1 cent. If in addition to an electric refrigerator and range the customer had an electric hot water heater, this service he could secure partly for 1 cent per kilowatt hour, and partly for 4 mills per kilowatt hour. All these services the consumer would receive for \$6.70 a month. Any other appliances which the consumer installed such as electrical house heating or cooling, he could operate at 4 mills per kilowatt hour.

"It is apparent that the rates proposed are designed to encourage and make possible the widest use of electric service, with all the individual and community benefits which go with such wide use."

A Learning Unit for Schools

The Tennessee Valley Looks to the Future

WALTER E. MYER

Editor, *The American Observer*

EDITORIAL NOTE—Of all the activities of the present administration, the TVA is the most constructive and prophetic. Here is the story told by a keen student and observer, after spending weeks in the Valley gathering material for this special JOURNAL feature.

IN THE SPRING of 1933 the United States government began an experiment in economic planning. By Act of Congress, May 18, it created the Tennessee Valley Authority. The Authority was given a very important—and a very difficult—assignment. Its job is to plan the industrial life and improve the well-being of a large section of the country. The region selected for the experiment is the territory which drains into the Tennessee River and its tributaries. This watershed, somewhat inaccurately termed the Tennessee Valley, takes in a great part of Tennessee and portions of six other states: Virginia, North Carolina, Georgia, Alabama, Mississippi, and Kentucky. Its area is about 42,000 square miles. Only 2,000,000 people live within the Valley area, but 6,000,000 are to be found within its sphere of influence.

The Tennessee Valley Authority, or the TVA as it is called, is doing its work in this territory. It is studying social conditions and social needs. It is making a survey of the natural resources, the soil, minerals, forests. It is canvassing the possibilities of water power development and is actively at work harnessing the waters of the Tennessee and its branches, creating a great, integrated power system. It is already generating electric power and selling it at low rates. It is devising means of preserving the fertility of the soil, of checking erosion, of encouraging the reforestation of the wooded regions. It is trying to find steady em-

than that. Its work in this Valley serves as a yardstick for the whole nation. In showing what can be done in planning the future of industry and agriculture, and in maintaining high standards of workmanship in all its operations, it will be suggesting what may be done elsewhere. It is working not only to promote industrial growth but to see that this growth contributes to the welfare of human beings. If the TVA succeeds in directing business and agricultural development so that the people of the Valley are happier and more secure, it will serve as an object lesson to the nation.

But why is it that this particular part of the country is being used as an experiment ground by the United States government? The choice of the Tennessee Valley is really a product of historical accident. There had been a long drawn-out discussion as to what should be done with the great dam and power plant at Muscle Shoals, Alabama. These had been built by the government during the war. They were to generate power for the production of nitrogen, needed in the making of explosives. When peace came, many people thought that the government should generate electricity for domestic and commercial use. Others said the government should keep out of business; that it should sell the plant to private interests. Twice Congress declared in favor of government operation. Each time the congressional bill was blocked by presidential veto. Finally, after more than a decade of indecisive wrangling, President Roosevelt settled the question. The government would operate the Muscle Shoals properties. But it would do more than that. It would use the power developed along the Tennessee as a part of a larger plan—a plan for the economic safety and welfare of the nation.

leads logically to national planning for a complete river watershed involving many states and the future lives and welfare of millions. It touches and gives life to all forms of human concerns.

I, therefore, suggest to the Congress legislation to create a Tennessee Valley Authority—a corporation clothed with the power of government but possessed of the flexibility and initiative of a private enterprise. It should be charged with the broadest duty of planning for the proper use, conservation, and development of the natural resources of the Tennessee River drainage basin and its adjoining territory for the general, social, and economic welfare of the nation. This Authority should be clothed also with the necessary power to carry these plans into effect. Its duty should be the rehabilitation of the Muscle Shoals development and the coordination of it with the wider plan.

Many hard lessons have taught us the human waste that results from lack of planning. Here and there a few wise cities and counties have looked ahead and planned. But our nation has "just grown." It is time to extend planning to a wider field, in this instance comprehending in one great project many states directly concerned with the basin of one of our greatest rivers.

This in a true sense is a return to the spirit and vision of the pioneer. If we are successful here we can march on, step by step, in a like development of other great natural territorial units within our borders.

The Authority is a corporation, owned by the government. There was set aside for its use \$50,000,000 from the \$3,300,000,000 public works fund. It is authorized to issue \$50,000,000 more in bonds on the credit of the United States. The Authority is administered by a Board of Directors consisting of three members appointed by the President.

The three directors are men who have long been interested in problems such as the Authority must meet. Arthur E. Morgan, chairman of the board, has had experience as a practical engineer. He is also a social engineer. As president of Antioch College, he was deeply concerned

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The TVA is working to improve conditions in the Tennessee Valley. That is its immediate object. But it is doing more

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The continued idleness of a great national investment in the Tennessee Valley leads me to ask the Congress for legislation necessary to enlist this project in the service of the people.

It is clear that the Muscle Shoals development is but a small part of the potential public usefulness of the entire Tennessee River. Such use, if envisioned in its entirety, transcends mere power development: it enters the wide field of flood control, soil erosion, afforestation, elimination from agricultural use of marginal lands, and distribution and diversification of industry. In short, this power development of war days

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The three directors are men who have long been interested in problems such as the Authority must meet. Arthur E. Morgan, chairman of the board, has had experience as a practical engineer. He is also a social engineer. As president of Antioch College, he was deeply concerned with the possibilities inherent in the development of small industries. He was concerned with methods of cooperation. He has for years been a student of problems relating to the development of a more stable society. Harcourt A. Morgan came to the TVA from the presidency of the University of Tennessee. He has been recognized as an authority on soils and on the problems of agriculture. He has been a leader in the advocacy of the decentralization of industry. David E. Lilienthal, a lawyer of Chicago, came to the TVA as a public utilities specialist.

The Valley As It Is

BEFORE we inquire any further into the activities of the TVA, perhaps we should consider the nature of the problems with which it has to deal. It is concerned, of course, with human problems; with conditions under which men and women and children live. It is trying to alter conditions so that people may be freer and happier. But what are some of these conditions? That we may

and more substantial than they are now. The time was when pioneer men and women, with hope in their hearts, pushed into the mountains and built these little homes. For a while hope may have seemed justified for there were fish in the streams and game in the woods. The forests themselves, while they lasted, furnished a source of revenue, and patches of the hillsides could be cleared for the planting of corn and potatoes.

But now the best of the forests are gone. Game is less plentiful. And the little fields on the steep slopes are denuded of their soil, for the heavy rains wash it from the cultivated spots into the swift mountain streams. So poverty has settled upon the mountain families, and hope has departed. Mile after mile, as one drives along, he sees tumble-down cabins, with the large families sitting aimlessly on the porches. The cabins are distressingly similar and the conditions of life are painfully alike. These families, sitting idly on the porches from Virginia to Georgia, are the victims of a regimentation of poverty which casts all into a mold of hopeless inactivity. Left to their own devices, there seems to be little prospect that these mountain people can find the way to a better industrial order. None of them sees the way, acting individually, to shake off the forces which have rendered them helpless.

As we reach the westward turn of the river and travel along the south-central portion of the watershed, we leave the hills and come to the cotton fields—the old plantation district. But the glamour

So here, as in the mountains, we look about and say, "This land has seen better days." Here, as there, the individual farmers seem unable to reorganize their economic lives.

Thru south-central Tennessee we find a richer soil and a more diversified agriculture. We see comfortable dwellings and well-kept farms. The villages and towns, tho perhaps not bustling with pre-depression activity, are showing, at any rate, no positive signs of decadence. On the Cumberland plateau, which forms a considerable portion of central and northern Tennessee, the soil appears to be thin, due in many cases to erosion; the forests have been cut and the second growth is not yet ready for cutting; the farms bear evidences of poverty; and the villages are running down. The frequent coal mining areas are victims of the depression. Many of the mines have ceased operation and where that has happened one finds stranded towns, the inhabitants sitting about, waiting for jobs which will probably never come back and meanwhile living largely upon charity and relief.

There are regions of neatness, thrift, and as much prosperity as American farming communities enjoy. Yet in the large, the prospect in the Valley is not encouraging.

Not that the inhabitants themselves are backward. They are of old-line American stock. They are as intelligent and resourceful as the natives of other sections. But they have been unable to make a living except by farming methods which have robbed the soil of its fertility. Fertilizers have not been available and the soil has got away from them. So have the forests. They have not developed a rich or diversified agriculture.

Even in the pre-depression days they were not finding employment for all

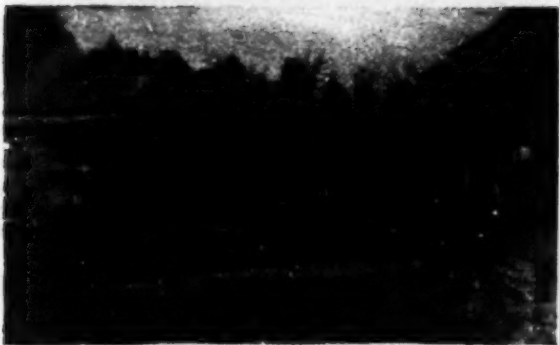


TVA photos

WASHDAY without modern conveniences is "blue Monday" indeed; two familiar landmarks—the old mill and the general store.

better answer that question, suppose we make an imaginary journey thru the Valley region, visiting several representative sections of the watershed.

As we travel thru the mountains which make up the eastern part of this territory, we are impressed by the facts of poverty and primitive living. The first impression is that the region is very sparsely peopled since for long distances



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better answer that question, suppose we make an imaginary journey thru the Valley region, visiting several representative sections of the watershed.

As we travel thru the mountains which make up the eastern part of this territory, we are impressed by the facts of poverty and primitive living. The first impression is that the region is very sparsely peopled, since for long distances few signs of human habitation are visible. But the narrow little valleys, or "hollers" as they are locally called, winding among the hills, are more thickly settled. On the small hillside farms are to be found the homes of the mountaineers—small huts or cabins, often of one or two rooms, and often in pitiful state of disrepair.

These little cabins were never spacious or comfortable, but once they were newer

plentiful. And the little fields on the steep slopes are denuded of their soil, for the heavy rains wash it from the cultivated spots into the swift mountain streams. So poverty has settled upon the mountain families, and hope has departed. Mile after mile, as one drives along, he sees tumble-down cabins, with the large families sitting aimlessly on the porches. The cabins are distressingly similar and the conditions of life are painfully alike. These families, sitting idly on the porches from Virginia to Georgia, are the victims of a regimentation of poverty which casts all into a mold of hopeless inactivity. Left to their own devices, there seems to be little prospect that these mountain people can find the way to a better industrial order. None of them sees the way, acting individually, to shake off the forces which have rendered them helpless.

As we reach the westward turn of the river and travel along the south-central portion of the watershed, we leave the hills and come to the cotton fields—the old plantation district. But the glamour of the old plantation days is gone. The planters have moved into the towns. The land is farmed largely by "sharecroppers."

The soil, planted year after year to cotton, becomes worn out. Dilapidated buildings tell the story of hard times which go back far beyond the crash of 1929. Cotton is the money crop of this region, and despite the falling yield, prices suffer from the fact of surplus.

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Not that the inhabitants themselves are backward. They are of old-line American stock. They are as intelligent and resourceful as the natives of other sections. But they have been unable to make a living except by farming methods which have robbed the soil of its fertility. Fertilizers have not been available and the soil has got away from them. So have the forests. They have not developed a rich or diversified agriculture.

Even in the pre-depression days they were not finding employment for all their workers. Their problems were social in nature and called for cooperative effort. But they did not act collectively. They did not plan their economic life. They depended upon individual effort and found it inadequate. Today conditions are such that some form of public planning—either that offered by the TVA or something of like nature—appears necessary if prosperity is ever to be attained.

are now working on the dam. A considerable number will remain in charge of the property when it is completed. Probably a few small industries will locate in Norris. Negotiations are now under way looking in that direction. It seems likely, therefore, that a permanent population of perhaps 2000 can be expected. Houses are being built to meet the demand, inexpensive houses of a beautiful design, built and equipped for comfort and convenience as well as beauty. The houses will remain in the possession of the TVA and will be rented to the occupants at a reasonable rental.

The houses which were built first had to be rented at a price which fit the pocketbooks of executives, engineers, and the highly skilled rather than unskilled workers. Experiments were later made with cinder block houses which can be rented at from \$14 to \$20 a month; houses which may set a new standard for low-cost construction. With each house will go a four-acre tract of farming ground. The farming plots will not be adjacent to the houses but will be near enough for convenience. The residents of Norris will have a chance to practise subsistence farming.

The Division of Social and Economic Development has collected an imposing body of information about local conditions in the Valley. Every county has been examined. Studies have been made of schools, of tax collections, financial conditions of counties and cities, unemployment, administration of justice, and a hundred other subjects. This information is so varied that it gives a very complete picture of the situation in every community. It is doubtful whether anywhere else in the United States an accumulation of so much definite information about local communities and their social, economic, and governmental problems exists.

If the TVA is thinking of helping an industry locate in a certain county, it goes to this division and finds out about the financial and social situation. This will help it to decide whether the industry should be established. This economic



TVA photo

Looking down one of the streets of Norris, Tennessee, we see a few of the finished houses

and social material is also useful if a co-operative association is planned or if a new highway is projected. The TVA needs it whenever any of its community plans are being considered. The TVA is also obliged to meet many immediate problems as a result of its developments. In the area soon to be flooded by the waters of Norris Lake, for example, there are some 3000 families, 26 schools, dozens of churches, sixty cemeteries, most of them small.

The TVA employs a large body of workers in its various operations, principally in the building of Norris and Wheeler Dams. These workers are of many classifications, skilled and unskilled. They are taken from the Tennessee Valley area. Negroes are employed in the same proportion that the negro population of the locality bears to the total population. For example, 20 percent of the workers at Wheeler and 4 percent at Norris are colored. An examination is given to applicants for work. It is a comprehensive examination designed to test ability to follow printed or oral directions, and mechanical aptitudes. Account is taken of those who cannot read or write. Selections are made from the applicants with the higher scores. Need as well as competence is given consideration. A disproportionate number are taken from stranded communities where the need for employment is especially acute.

Close and sympathetic relations are maintained with the workers. They may do as they please about joining unions. Most of the crafts are organized, being

members of national organizations. Those in charge of the labor policy impress upon the foremen the desirability of establishing cordial and helpful relations with the men.

This enlightened labor policy is bearing fruit. The relationship with the workers is peculiarly constructive. Union committees confer with the management about efficiency measures, and union officials negotiate with the authorities about the possibility of bringing in new industries in order to furnish continuous employment.

At Norris the men work in four shifts, 5½ hours a day, six days a week. Provision is made for leisure time. A recreation hall is maintained; dances are given; speakers are brought in, sometimes by the unions. Vocational training is given to those who wish it. Instruction is given voluntarily by members of the TVA staff. There are courses in agriculture, motor mechanics, electricity, and forms of engineering. The purpose of the training is to fit the workers to better their lot when the Norris job is finished. The men taking this training will be able to hold better places in their own communities.

The spirit of the workers is indicated by the fact that not long ago the entire machine shop force gave notice that they wished instruction from the training section. In the request it was stated that the unskilled wanted training which would fit them for skilled positions, and that the skilled workers wanted instruction "so that they may be more useful to the TVA and be better all round mechanics."

Looks to the Future

The New Industrialism—Promise or Threat?

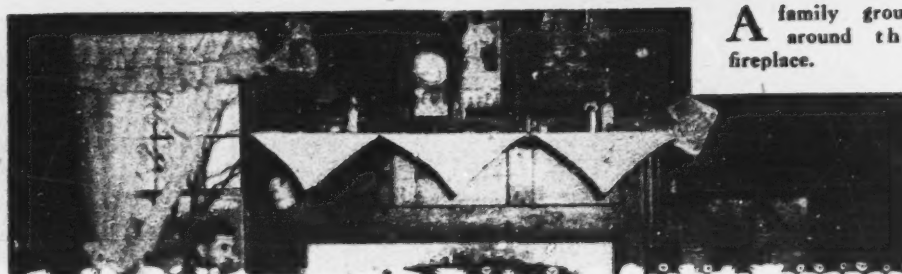
THE STUDENT of Valley conditions does not come away, however, with a feeling of hopelessness. An appraisal of the resources of the region leads to the conviction that an economic development beyond anything the past has known is a possibility. It seems by no means out of the question for this region in the middle South to become a great center of industry and trade. Enthusiasts speak of it as the coming "American Ruhr." There are fuels here, coal in abundance, lignite, petroleum, natural gas. There are such heavy metals as iron ore, manganese, chromium, and nickel. Among the light metals are aluminum and magnesium. There are quantities of materials for the production of cement, fertilizers, ceramics, and chemical products. Add to the abundant mineral resources the fact of low-cost electric power in generous quantities and adequate transportation facilities—water, rail, and highway—and we have the foundations upon which a flourishing society may be built.

The industrialization of this section of the South was already under way during the years preceding the depression. Textile manufacturers, taking advantage of cheap labor and relatively cheap power, had been moving from New England and the Middle Atlantic states to the South, and mill towns, scattered over the Tennessee Valley region, are the result. Here and there, the mill owners have due regard for the labor forces, and higher standards of living have been attained. In other instances, however, the mills have operated by a system amounting practically to peonage. Men, women, and children, brought in from the hills, were given work at starvation wages. Industry in the South has indeed been stimulated, but southern standards of living have not been adequately raised. The shifting of industry has too often impoverished

sibility under the rules of the old game of "rugged individualism."

We sometimes say as we look upon the once prim villages and green fields of industrial England, now bleak and begrimed; as we see men and women shambling from their miserable hovels to the sordid factories, their lives as bleak as the smoke-befouled hills themselves—we say as we look upon this cradle of the Industrial Revolution, or upon the more recent examples of industrialization in Pittsburgh or northern Indiana and Ohio, "If we but had this to do over again! We would direct the forces of industrialization in such a way as to conserve the beauties of nature and the welfare of human beings." Well, here in the Tennessee Valley is a soil ready for industrialization, and thoughtful people are beginning to inquire what that industrialization shall mean in human values. It is because of the possibilities involved in the developments of the next few decades, possibilities of tragic import to the whole nation, that the TVA finds this Valley such a fertile field for its program of economic and social development with human wellbeing rather than excessive manufacturing profits as the guiding aim.

UPPER RIGHT—This old mill wheel built in 1885 is still being used. CENTER RIGHT—Girl operating the warp compressor in a textile mill. The industrialization of the south was under way before the depression. [TVA photos]



A family group around the fireplace.



Photo by U. S. Forest Service
Heavy stand of timber, state of Washington

THE Tennessee Valley Authority is trying to save or restore the soil and the forests of the Valley. That is one of its first and most important jobs. The forests present a difficult problem. There are eighteen million acres of forest land in the Valley area, but only one-half million is virgin forest. The rest is second growth. Now forest land, if it is to be productive, must be cared for. The owner must cut only a certain proportion a year, cutting his forest slowly enough so that by the time he gets over the ground the plot first cut will be ready for cutting again. Only by such a method of cutting will the yield from the forest be regular and stable. Privately-owned forests are seldom cut in that way, because the owner cannot wait so long for his income—he cannot wait fifty years or so to cut his trees. Forests can be preserved satisfactorily only if they are public-owned. Public authorities alone can be depended upon to adopt and maintain long-range policies.

That is the big problem with the Tennessee Valley forest lands. Only one and one-half million acres are owned by the public. The public forests are mostly in the Smoky Mountain National Park and the National Forests, the other are state forests, and the TVA has some forest land. The National Forest Service intends to obtain three million acres more, bringing the publicly-owned forests to four and one-half million acres. Scientific reforestation will be carried on in these forests.

the growth of vegetation, such as cotton, but because it gives strength to the cotton plant and insures it against disease. It also lends quality and flavor to vegetables of nearly all kinds. Potash may be had commercially in large quantities in Germany and in considerable quantities in New Mexico. It is also present in manures and may be obtained in sufficient quantities in regions where stock is raised. Potash production, therefore, works well with the production of nitrogen, for stock may be pastured on the legumes which put nitrogen into the soil.

Plans for the future prosperity of the Tennessee Valley must consider the restoration of the soil. Wasteful, careless, and unskillful methods of agriculture have caused an alarming loss of fertility. A great portion of the land is mountainous, hilly, or rolling in character, and much of the surface soil has been washed away from the slopes. Steep lands, which should never have been cultivated, have been plowed and put to crops, and this cultivated soil has washed away, leaving an unfertile subsoil on the surface. In the plateau region, which makes up from a tenth to a sixth of the Tennessee watershed, the soil has grown thin thru erosion. In the lower country there are large one-crop areas. The farms have been planted to corn or cotton or tobacco year after year, and these recurring crops have drawn so much of the substance from the soil that fertility can be maintained only thru the use of fertilizers.

Four fertilizer elements are needed for the support of vegetation. These plant foods are nitrogen, phosphorus, potash, and lime. There is no very serious problem in connection with lime for it is found in sufficient quantities and may be had at a low price. Nitrogen is greatly needed but, until lately, the price was high. Recently new methods of manufacturing nitrates, from the nitrogen which makes up a large part of the air, have been developed, and the price has fallen. At the same time it has been found that farmers need not depend upon commercial nitrates at all. They can develop their own supply. Nitrogen is present in the air everywhere. Legumes, such as clover or alfalfa, extract the nitrogen from the air and establish it in the soil. Land sown for a few years to legumes becomes rich again in nitrogen.

Another food required by plants is phosphorus and the problem of obtaining phosphates is not so simple. Phosphate rock is found in abundance in

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The most serious problem of fertilizer development is the production of phosphates, and on this problem the TVA is seriously at work. The great nitrate plants at Muscle Shoals are no longer needed for the production of nitrogen, but Nitrate Plant No. 2, a huge development, costing originally \$75,000,000, covering 2300 acres and containing fourteen factory buildings, is being used as an experiment station for the production of cheap phosphates. Considerable progress has already been achieved thru the operations which are being performed on the phosphate rock brought in from central Tennessee.

In its effort to produce and distribute more and better fertilizers, the Tennessee Valley Authority is not working alone. It is cooperating with agricultural stations in each of the seven states within the Valley area. Representatives from institutions in each state work with the Authority in devising plans for fertilization. The different state institutions are kept informed as to the progress of the experiments. Careful studies are being made of soils and soil needs in all parts of the Valley, and a concerted effort is being made by associated scientists, under the leadership of the TVA, in an effort to restore and maintain the fertility of the entire region. New and better means of producing fertilizers as perfected by TVA will be available to private industry, providing a share of the savings is passed on to the farmer.

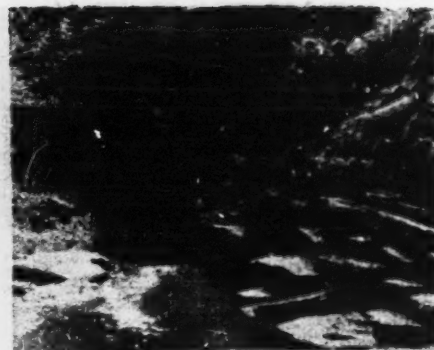
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A renewed drive toward industrialization is in prospect for the Valley as soon as normal times return. What will be the fruit of that industrialization? Will these new industries displace those of the North because of their cheaper power and labor? Will they bring unemployment and decay to the industrial centers of the East and the Midwest without greatly raising the standards of living in the South? That would be a distinct pos-

say as we look upon this cradle of the Industrial Revolution, or upon the more recent examples of industrialization in Pittsburgh or northern Indiana and Ohio, "If we but had this to do over again! We would direct the forces of industrialization in such a way as to conserve the beauties of nature and the welfare of human beings." Well, here in the Tennessee Valley is a soil ready for industrialization, and thoughtful people are beginning to inquire what that industrialization shall mean in human values. It is because of the possibilities involved in the developments of the next few decades, possibilities of tragic import to the whole nation, that the TVA finds this Valley such a fertile field for its program of economic and social development with human wellbeing rather than excessive manufacturing profits as the guiding aim.

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A family group around the fireplace.

Laying Out the Plans



Preparing clay for pottery

IF AN industrial counselor were appointed adviser to a large estate and were asked to help shape the policies of the manager, his first step could easily be predicted. He would find out all he could about the estate's resources. He would

inquire about its properties and the personnel. He would study the men and women with whom he would be obliged to work.

That is the sort of thing the TVA is doing as it takes the position of adviser to the Tennessee Valley. It maintains a Division of Land Planning and Housing and another Division of Social and Economic Studies. The Land Planning Division is making an inventory of the natural resources. It is locating mineral deposits. It is classifying the soils of the different sections. It is studying transportation facilities.

When the TVA learns about the minerals and soils and railroads and highways and waterways and water power sites, it will be in a better position to give industrial advice. It may discover, for example, that kaolin and feldspar are located in a certain district. It knows that these materials are used in the making

of chinaware. It sees that a ceramic or chinaware industry can be developed in that locality. But the TVA is not passive.

It does not stop when it discovers the possibility of the ceramic industry. It gives positive assistance. It may, for example, furnish low cost electric power so that the industry can get under way on advantageous terms. It finds out what industries can be operated profitably in the Valley and at what locations. In this way it gives direction to the course of industrial development.

The Tennessee Valley Authority undertakes to assist industries which will contribute to the welfare of the people. It is not interested in developing industrial centers merely in order that profits may be made or in order that population in certain cities may increase. It wants the low cost electric power and fertilizer which it furnishes actually to help raise the standard of living. That is why it goes to such pains to study resources, human and material. It must know how to use all its powers effectively toward the betterment of human conditions.

The TVA does not think exclusively of the Tennessee Valley in its planning.

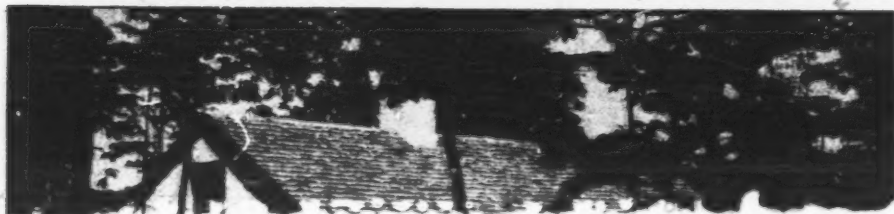
It takes the rest of the nation into account. It is in a position to help business enterprises materially. It may, for exam-



THE three directors: Harcourt A. Morgan; Arthur E. Morgan, chairman; and David E. Lilienthal.

ple, furnish them with electric power at low cost. This may give a business a decided advantage. But the TVA does not want to develop industries which will compete ruinously with industries in other parts of the country. If it can avoid the danger of cut-throat competition between sections, which we spoke of a while ago, it will do so. Here is where the Division of Planning is influential. It finds opportunities for the development of industries in which the Valley may specialize. If, for example, it can point the way to the development of a chinaware industry in Tennessee, it will be helping the people of Tennessee without hurting other parts of the country, for there is no chinaware industry of importance in America. Our high grade china is imported.

The Division of Land Planning and General Engineering Division draw up plans for dams, reservoirs, and all sorts of public works. With all these plans at hand it advises with the highway commissions of all the states so that roads will be built where they will be perma-



factors. A great deal of the land slopes steeply; the soil is especially soft; and the rainfall is very heavy.

Naturally we find erosion at its worst on the steep mountain slopes. The wearing away of the land goes on very slowly and is not an alarming problem when the surface is covered with forests or a thick growth of grass. But hillside farmers have in many cases cut down the trees and have plowed the land where the slope is so steep that it should never have been cultivated. Land is cleared and planted to corn and potatoes, and within three or four years the soil from the fields is washed away, so that the yield falls to almost nothing. The farmers often abandon a field after a few years and clear other patches and put them out to crops, until the new fields, too, have washed away. On the gentler

forests. Cattle raising should in many cases take the place of corn and potato cultivation. With the cheap fertilizers which the TVA hopes to develop, the growing of the sod crops should be easier.

Meanwhile, a positive work of erosion prevention is necessary. The gullies must be filled so as to check the wearing away of the soil. The problem is particularly acute in the territory which drains into the lake to be created thru the erection of Norris Dam. This lake lies in a hilly country where erosion is proceeding at a rapid rate.

The TVA is conducting an intensive campaign of erosion prevention in this territory. It is cooperating with the Civilian Conservation Corps. It is directing the efforts of twenty-one camps consisting of over 4000 CCC boys.

It is systematically filling the gullies

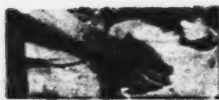
caught by this mass of brush and is deposited. The grass grows and, after a while, the torrents of water are stopped and a beginning is made in the covering of the slope with grass. At the very outset the filling in of the gullies retards the swiftness of the streams and checks the cutting away of the soil. It is thought that if the TVA can keep the CCC boys at this task for two years, the worst of the soil erosion in the region about Norris Lake may be checked.

But in the long run effective erosion prevention thruout the Valley must be effected, not thru the positive acts of the TVA or any other central organization, but thru the enlightened efforts of the farmers themselves. Encouraging progress has been made in arousing a public sentiment which may lead to a general campaign for the preservation of the soil.



CCC boys starting to work on a badly eroded hillside

TVA photo



Preparing clay for pottery

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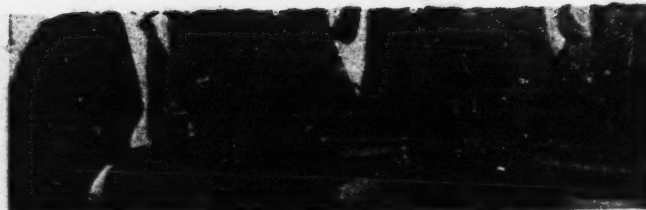
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An electrified house at Norris, Tennessee

TVA photos

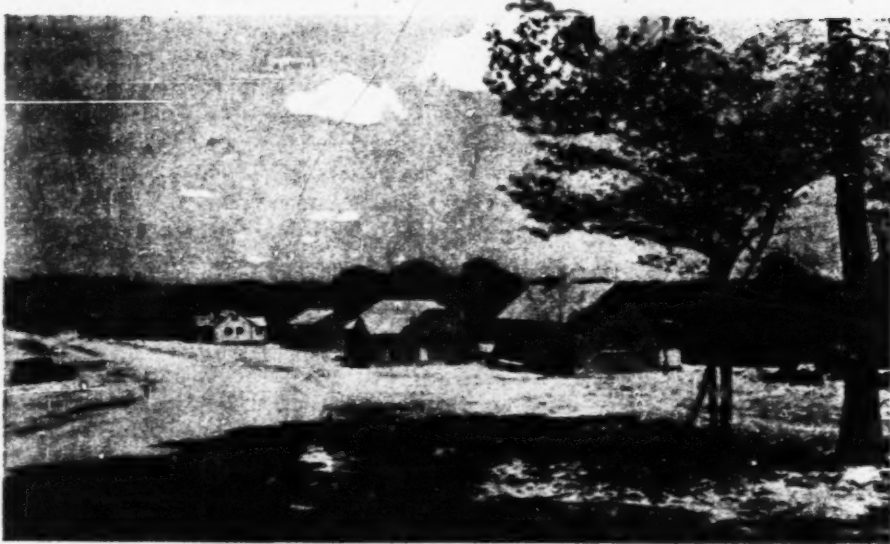
Looks to the Future

Experiments in Planning

THIS DIVISION is also building a little town, Norris, named in honor of the Nebraska Senator who so long led the campaign for the operation of Muscle Shoals by the government. The town is near the dam of the same name—about twenty miles northwest of Knoxville, Tennessee. Nearly 2000 men are now working on the dam. A considerable number will remain in charge of the property when it is completed. Probably a few small industries will locate in Norris. Negotiations are now under way looking in that direction. It seems likely, therefore, that a permanent population of perhaps 2000 can be expected. Houses are being built to meet the demand, inexpensive houses of a beautiful design, built and equipped for comfort and convenience as well as beauty. The houses will remain in the possession of the TVA and will be rented to the occupants at a reasonable rental.

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on power development than on all the rest of its program. It is engaged in a great power project, harnessing the waters of the Tennessee and its tributaries for production on a great scale. It is utilizing these waters to develop an integrated system of power plants, which, when completed, will have capacity to generate more electricity than is now consumed in all the southeastern states.

This integrated system, all under the TVA unified control, consisting of a string of dams and generating plants, will place low-cost electricity at the service of the people. It will brighten millions of homes, on the farms as well as in the cities; it will lighten the burdens of domestic labor; it will stimulate industry. It may be a powerful tool in the hands of the industrial planners.

The first link in this chain of plants with which the Tennessee River system is to be harnessed has already been forged. The Wilson Dam and power

dam. On the crest of the dam is a 20-foot highway across the river. Running parallel with the dam is the power house, nearly a quarter of a mile long and 145 feet wide. In this power house nine great turbines are installed and there is room for as many more. When this plant is fully equipped it will be capable of meeting the power needs of literally hundreds of towns.

But the Wilson Dam and power plant, located at Muscle Shoals, Alabama, must not be thought of as an isolated unit. It is a link in a chain, the other links being either under construction or under consideration. Up the river fifteen miles from Muscle Shoals, the Wheeler Dam is being built. The power plant at this dam, when completed, will have a capacity about half that of the plant at Wilson Dam. The Wheeler Dam will serve another purpose. It will be an aid to navigation. It will create a lake which will extend up the river for eighty miles, rendering the river navigable for that distance.

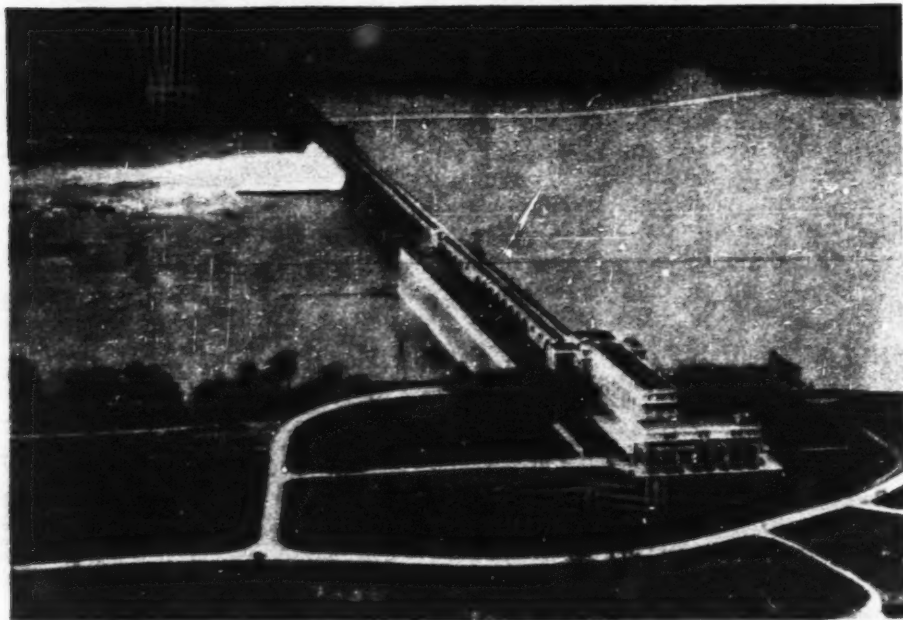
purpose of holding back and storing the water of the river during the flood seasons—fall and spring—thus creating a lake. The lake will have an area of 83 square miles. During the dry season, when the river is ordinarily very low, the water will be released, generating power at Norris Dam and at every dam down the river. In addition, by regulating the river's flow, it will aid navigation.

The storing of the water during the rainy season will prevent floods down the river and will thus save lives and property. The operation of the Norris Dam will also increase the efficiency and productivity of the plant at Wilson Dam. During the rainy season the river is high and there is plenty of water. The power plant can run at capacity. But during the dry seasons the river is low and there is not enough water to keep the turbines going at capacity. Only about a fifth as much electricity can be produced during the dry season as can be generated when the river is high.

This is a serious matter, for a power plant cannot sell more electricity at any time than it can produce at all times. No city and no private firm will contract to buy power unless it can be assured that delivery will be made at all times.

The practical capacity of the Muscle Shoals plant is, therefore, only a fraction of the capacity which appears on paper. Norris Dam will regularize the flow of the river, so that there will never be a very low period. The building of Norris Dam will increase the practical capacity at Muscle Shoals severalfold. Norris Dam itself will produce some power. During the dry time when water is flowing thru the dam, electricity will be generated at the Norris plant.

Four other dams are planned. They, too, are parts of a unified system. Water stored at Norris Dam will help all the plants down the river because it will equalize the flow of water.



Wilson Dam at Muscle Shoals, Alabama, as seen from the air

TVA photo

Forests and Soil

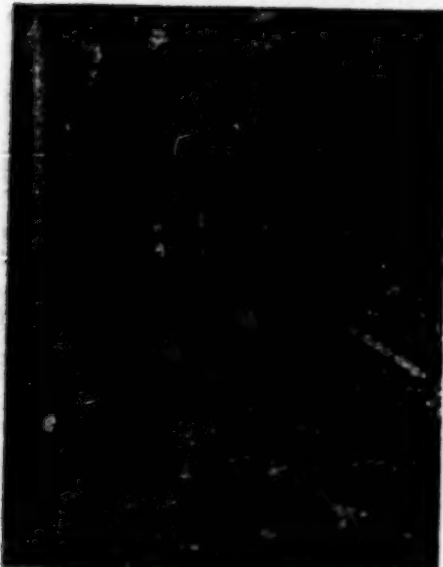


Photo by U. S. Forest Service

Heavy stand of timber, state of Washington

THE Tennessee Valley Authority is trying to save or restore the soil and the forests of the Valley. That is one of its first and most important jobs. The forests present a difficult problem. There are eighteen million acres of forest land in the Valley area, but only one-half million is virgin forest. The rest is second growth. Now forest land, if it is to be productive, must be cared for. The owner must cut only a certain proportion a year, cutting his forest slowly enough so that by the time he gets over the ground the plot first cut will be ready for cutting again. Only by such a method of cutting will the yield from the forest be regular and stable. Privately-owned forests are seldom cut in that way, because the owner cannot wait so long for his income—he cannot wait fifty years or so to cut his trees. Forests can be preserved satisfactorily only if they are public-owned. Public authorities alone can be depended upon to adopt

But twelve or thirteen million acres are in private hands and it will be very hard to do anything with the private woodlands. The TVA is making an inventory of the forests so that it will know the ownership of every tract. Then it will try to formulate and carry out a policy. Meanwhile, those in charge of the forestry work of the TVA are advising that industries calling for the use of wood be discouraged until the forests are ready.

Plans for the future prosperity of the Tennessee Valley must consider the restoration of the soil. Wasteful, careless, and unskillful methods of agriculture have caused an alarming loss of fertility. A great portion of the land is mountainous, hilly, or rolling in character, and much of the surface soil has been washed away from the slopes. Steep lands, which should never have been cultivated, have been plowed and put to crops, and this cultivated soil has washed away, leaving an unfertile subsoil on the surface. In the plateau region, which makes up from a tenth to a sixth of the Tennessee watershed, the soil has grown thin thru erosion. In the lower country there are large one-crop areas. The farms have been planted to corn or cotton or tobacco year after year, and these recurring crops have drawn so much of the substance from the soil that fertility can be maintained only thru the use of fertilizers.

Four fertilizer elements are needed for the support of vegetation. These plant foods are nitrogen, phosphorus, potash, and lime. There is no very serious problem in connection with lime for it is found in sufficient quantities and may be had at a low price. Nitrogen is greatly needed but, until lately, the price was high. Recently new methods of manufacturing nitrates, from the nitrogen which

central Tennessee, but present methods of extraction and distribution are such as to render the finished product expensive. There is this further complication: Phosphates are needed especially in the growing of legumes, so its presence is necessary to create the conditions under which nitrogen may be developed. Potash is needed, not because it contributes to the growth of vegetation, such as cotton, but because it gives strength to the cotton plant and insures it against disease. It also lends quality and flavor to vegetables of nearly all kinds. Potash may be had commercially in large quantities in Germany and in considerable quantities in New Mexico. It is also present in manures and may be obtained in sufficient quantities in regions where stock is raised. Potash production, therefore, works well with the production of nitrogen, for stock may be pastured on the legumes which put nitrogen into the soil.

The most serious problem of fertilizer development is the production of phosphates, and on this problem the TVA is seriously at work. The great nitrate plants at Muscle Shoals are no longer needed for the production of nitrogen, but Nitrate Plant No. 2, a huge development, costing originally \$75,000,000, covering 2300 acres and containing fourteen factory buildings, is being used as an experiment station for the production of cheap phosphates. Considerable progress has already been achieved thru the operations which are being performed on the phosphate rock brought in from central Tennessee.

In its effort to produce and distribute more and better fertilizers, the Tennessee Valley Authority is not working alone. It is cooperating with agricultural stations in each of the seven states within the Valley area. Representatives from

is more effective protection of the public interest, by the setting up of a measure of public operation of power as a 'yardstick.' The second objective of this new national policy is a greatly increased use of electricity in the homes, the farms, and the factories of the United States—an electrified America."

A yardstick to determine the fairness of rates charged by private power companies has long been needed. It has been almost impossible to find what rates were reasonable. Customers complained when they thought their bills were too high. Sometimes they took their grievances to state utility boards. Arguments were presented before the boards. The companies pointed to their heavy investments, their interest charges, costs of operation, taxes. They held that their profits were small. Representatives of consumers declared the companies were over-capitalized, that the financial interests owning the companies were wasteful, inefficient; that exorbitant salaries were paid and bonuses given to insiders.

When arguments of this sort are going on it is natural that both sides, the utilities on the one hand and consumer interests on the other, should try to control the bodies which regulate rates. The utility companies say that they must protect themselves against unjust regulation; that is, against what they consider to be unjust regulation. So they take a hand in politics. They seek to influence public opinion insofar as it relates to the regulation of utility rates. They buy advertising in newspapers. They seek to influence editorial policy. They carry their influence to the schools and secure the adoption of textbooks which are favorable to utility companies and the elimination from other textbooks of statements they consider harmful. They bring about the rejection of texts which are too critical. Sometimes they induce boards of education to dismiss teachers who criticize the policies of the great power companies. Arguments carried on in such

Here is where the government steps in. When Congress created the TVA and defined its powers it said in effect: "We will settle this question of rates by a trial comparison; we will have the government generate, transmit, and sell electricity in a given region.

Acting thru the TVA, the government will manufacture the power as private companies do. It will charge against itself all the expense which it incurs, including taxes. It will sell the power to the same sort of customers to whom they sell. It will keep a careful record of its costs. It will find out how much it costs to produce and sell electric power. This action of the government will serve as a 'yardstick' by which to determine what the costs of production are and what prices are fair."

The TVA is authorized to use as much electricity as it needs in the development of its own projects. The surplus power will be sold. It will undertake to provide electricity to states, cities, and cooperative associations. These cooperatives may distribute electricity to towns or to farmers. The usual procedure is for the TVA to generate the electricity and send it over its own transmission lines to a town which is to use it. The town or city usually owns its own distribution system. It buys the electricity at wholesale rates from the TVA and sells it to its own citizens. The TVA has a fixed price at which electricity is delivered to municipalities. It also prescribes the retail rates which the municipalities shall make to private users. In this way it is assured that the benefit of cheap electric power furnished by the TVA shall be passed on to consumers. If there is a surplus of electricity after states, towns, and cooperative associations are served, the TVA may sell it to private companies for manufacturing



TVA photo

GENERATORS in the great hall of Wilson Dam power house. This hall is 1197 feet long and 145 feet wide. Many feet below the generators are the giant rotors thru which the waters of the Tennessee are passed to manufacture cheap power for people in the region.

purposes, or it may sell its surplus to private power companies.

When the TVA makes a contract to sell electricity to a municipality which has been getting its power from a private company, the TVA offers to buy the company's equipment. It does not want to go into the community and build its own transmission lines, duplicating the equipment which the private company already has. Arrangements have already been made whereby the TVA has taken over the transmission lines previously owned by private companies in a number of counties of northern Alabama, northern Mississippi, and Tennessee. It is prepared, therefore, to furnish power to the communities of these areas. It is already serving several small cities and it has formed an agreement whereby it is to serve the larger city of Knoxville, Tennessee. It has purchased the equipment of the private power company with which Knoxville has been dealing. In order that the costs of producing and selling electricity may be fairly measured, the TVA feels that it must have a reasonably good territory to serve. It must sell to a number of small towns. It must have lines going to farmers. It must have a few larger cities and must serve industrial plants of considerable size. If it is selling electricity to a varied field of this kind, it can determine the cost of electric power under conditions similar to those under which the large private companies operate.

Encouraging Electrification

THE FIRST CITY to begin the use of TVA power was Tupelo, Mississippi, a town of about 6000. Tupelo already owned its own distribution system, buying its power from a private company. It now buys power from the TVA. It operates this system as a strictly business enterprise. The books are kept separately from other city accounts and are carefully audited. Taxes, interest, and depreciation are counted as part of the costs. Consumers are charged enough to meet all these expenses of distribution and to pay off the indebtedness. After meeting all these charges, however, just as a private company would, Tupelo is able to sell electricity to its inhabitants at a price about 40 percent lower than that which had been paid to the private company. The TVA sells electricity cheaply enough to make this saving possible.

The lower price of electricity has resulted in increased use. During the first six months that Tupelo was getting its power from the TVA, there was an increase of 83 percent in the amount of electricity used in the homes of the city. In part this came thru the securing of new customers. Families which had not been able to afford electricity before were electrifying their houses. In part it came from increased use by families which had been customers all the time. During the first two months that Tupelo was using TVA electricity, \$6000 worth of electrical equipment was sold in the city. This means one dollar's worth of equipment per person, or about five dollars' worth per family. The cheap electricity obtained by Tupelo is thus having the effect

thusiastically to the time when a considerable number of the farmers may have electricity in their homes.

Electricity can be sold more cheaply if it is sold in great quantities. If the power plants can run at capacity, and if all the product can be disposed of, the cost of production per kilowatt hour will be very much less than it would if a large part of the equipment were lying idle. Prices have been high because so little electricity was consumed, and consumption has been low because prices have been high. The TVA now comes in producing electricity in quantities and planning to produce it in vastly greater quantities. It is planning to produce more than the region it intends to serve is now

and it gives it on favorable terms. It secures the cooperation of the manufacturers of electrical equipment. The manufacturers of electric refrigerators, for example, put on the market a specially made ice box. It is simple in design and less costly than the standard refrigerators. It is a serviceable product, however, and it bears the stamp of TVA approval. These refrigerators sell for as little as \$75 each. They are sold by the manufacturing companies to private dealers, just as other refrigerators are. They are purchased by individual customers. The customer pays perhaps 10 percent in cash and agrees to pay the rest in monthly installments over a period of three years. These monthly payments are added to his electric bill.

The EHFA thus encourages the more widespread use of electricity by furnishing credit to purchasers of equipment on easy terms and by inducing manufacturers of equipment to put out low-cost, high-grade products. But it does not stop there. It cooperates with manufacturers and dealers in setting up displays, in providing cooking schools, which emphasize the use of electrical equipment, and, in every possible way, it works with manufacturers, dealers, and private power companies in popularizing the use of electricity. It is the hope of those in charge of the TVA and EHFA that, by furnishing cheap power and cheap electrical equipment and by bringing the advantages of the use of electricity to the attention of the people, great strides may be made toward the electrification of America.



Tupelo—first to have America's cheapest electricity

consuming. It is acting on the theory that use depends largely upon prices and that if prices go down use will increase.

Consumption of electricity has been held down not only by high rates but by the price of electrical appliances. Electric refrigerators, electric stoves, and electric water heaters have been so costly that many consumers have hesitated to

for them even to obtain a living from the soil. Acting individually they seemed condemned to the same meagre existence which characterizes the lives of most mountaineers thruout this region. A really effective leader, however, appeared among them, S. T. Henry—like Johnson of Kingsport, an unusual man. Henry is a graduate of Illinois University. He has had Wall Street experience. He has engaged in the publishing business. But years ago he went to Spruce Pine, built a little home on a mountain top, and identified himself with the community.

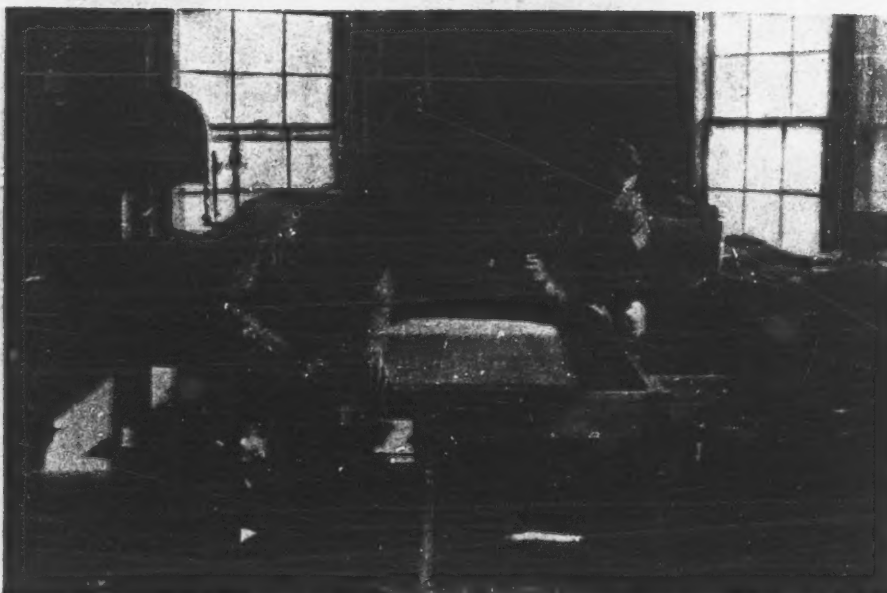
Under the leadership of Mr. Henry and with the help of the Tennessee Valley Authority, a cooperative association was formed. This association could not possibly have gained support had it not had the endorsement of the TVA, and it could not have carried on its work without loans and expert counsel from that quarter. This cooperative has developed a seed potato industry. It has put up canneries so that now the farmers have a market for their tomatoes and beans at the local canneries. The cooperative secures a market for these products. It turns out, however, that the canned goods which are manufactured in the locality are not all thrown upon the markets of the nation to add to the surplus of agricultural products. Much of the canned vegetables are consumed by the people of Spruce Pine, people who before had been eating vegetables only during the vegetable season. A new market has thus been created in the community, the result being a higher standard of living.

But the cooperative association of Spruce Pine has further ideas as to the development of the locality. The raw materials needed in making dishes are all present in the soil of that district. It is planned, therefore, to engage in the manufacture of pottery. Arrangements are being considered whereby TVA electric power may be made available, and thru use of the electric process it is thought that a cheap and fine grade of pottery may be produced. Nor is that all.

hoped that herds of cattle may be kept during the winter down in the valleys where corn and other concentrated forms of feed may be had, and driven to the mountain sides in the summer.

In the little town of Banner Elk, also in the North Carolina mountains, is Lees-

TVA. Half a dozen cooperatives, assisted by the TVA are in operation, and several more are being formed. They have thousands of members. In these little communities, as in the others we have spoken of, one feels that a new and better and more secure way of life is being discovered.



Handicraft school loom and shop in Gatlinburg, Tennessee

TVA photos

Looks to the Future

Checking Soil Erosion

LITTLE can be done, however, to maintain the fertility of soil which is constantly wearing away under pressure of heavy rains. Erosion is, of course, going on at all times in all parts of the country. Every creek or river valley is the result of the carrying away of soil thru the ages. Soil is washing away and blowing away. But the problem is especially serious in the Tennessee Valley because of a combination of three factors. A great deal of the land slopes steeply; the soil is especially soft; and the rainfall is very heavy.

Naturally we find erosion at its worst on the steep mountain slopes. The wearing away of the land goes on very slowly and is not an alarming problem when the surface is covered with forests or a thick growth of grass. But hillside farmers have in many cases cut down the trees and have plowed the land where the slope is so steep that it should never have been cultivated. Land is cleared and planted to corn and potatoes, and within three or four years the soil from the fields is washed away, so that the yield falls to almost nothing. The farmers often abandon a field after a few years and clear other patches and put them out to crops, until the new fields, too, have washed away. On the gentler

slopes, erosion is not so bad, but it goes on just the same, as occasional great gullies with a thin and barren soil between abundantly show.

The TVA is at work on this problem. It is cooperating with farm bureaus and other organizations to teach people how to use their sloping lands. These slopes should not be plowed, but should be given over to sod crops, to grass or clover, or should be turned back into forests. Cattle raising should in many cases take the place of corn and potato cultivation. With the cheap fertilizers which the TVA hopes to develop, the growing of the sod crops should be easier.

Meanwhile, a positive work of erosion prevention is necessary. The gullies must be filled so as to check the wearing away of the soil. The problem is particularly acute in the territory which drains into the lake to be created thru the erection of Norris Dam. This lake lies in a hilly country where erosion is proceeding at a rapid rate.

The TVA is conducting an intensive campaign of erosion prevention in this territory. It is cooperating with the Civilian Conservation Corps. It is directing the efforts of twenty-one camps consisting of over 4000 CCC boys.

It is systematically filling the gullies

and ditches thru which the water pours in torrents, carrying tons of soil with it. In some cases stone dams are built across the gullies to check the flow of water. This is an expensive process, however, so a more economical method has been developed. Brush and branches of cedar trees are thrown into the gullies, staked down, and fastened with a tangle of wire. Grass seeds are thrown among the branches. As the soil washes down it is caught by this mass of brush and is deposited. The grass grows and, after a while, the torrents of water are stopped and a beginning is made in the covering of the slope with grass. At the very outset the filling in of the gullies retards the swiftness of the streams and checks the cutting away of the soil. It is thought that if the TVA can keep the CCC boys at this task for two years, the worst of the soil erosion in the region about Norris Lake may be checked.

But in the long run effective erosion prevention thruout the Valley must be effected, not thru the positive acts of the TVA or any other central organization, but thru the enlightened efforts of the farmers themselves. Encouraging progress has been made in arousing a public sentiment which may lead to a general campaign for the preservation of the soil.

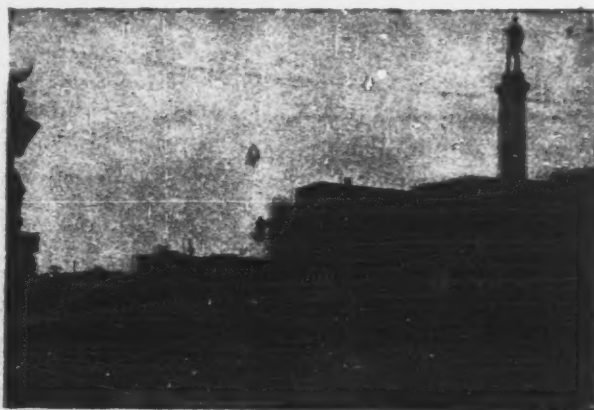


city accounts and are carefully audited. Taxes, interest, and depreciation are counted as part of the costs. Consumers are charged enough to meet all these expenses of distribution and to pay off the indebtedness. After meeting all these charges, however, just as a private company would, Tupelo is able to sell electricity to its inhabitants at a price about 40 percent lower than that which had been paid to the private company. The TVA sells electricity cheaply enough to make this saving possible.

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In Corinth, Mississippi, a town about the size of Tupelo, the local distribution system is owned not by the municipality but by a county cooperative association. Electricity is being obtained from the TVA on the same terms as it is obtained in Tupelo, and with about the same reduction in cost to consumers. The people of Alcorn County, of which Corinth is the county seat, are looking forward en-

de very much less than it would if a large part of the equipment were lying idle. Prices have been high because so little electricity was consumed, and consumption has been low because prices have been high. The TVA now comes in producing electricity in quantities and planning to produce it in vastly greater quantities. It is planning to produce more than the region it intends to serve is now



Tupelo—first to have America's cheapest electricity

consuming. It is acting on the theory that use depends largely upon prices and that if prices go down use will increase.

Consumption of electricity has been held down not only by high rates but by the price of electrical appliances. Electric refrigerators, electric stoves, and electric water heaters have been so costly that many consumers have hesitated to buy them. They must be in the homes, however, if electricity in considerable amounts is to be consumed. A way has been devised by which this electrical equipment is made available at a cheaper price than it formerly was and on easier terms of payment.

This cheapening of electrical equipment has been made possible thru the efforts of the Electric Home and Farm Authority, which is an agency of the TVA and controlled by the same board of directors. The EHFA does not manufacture or sell equipment. It furnishes credit to persons who buy the equipment

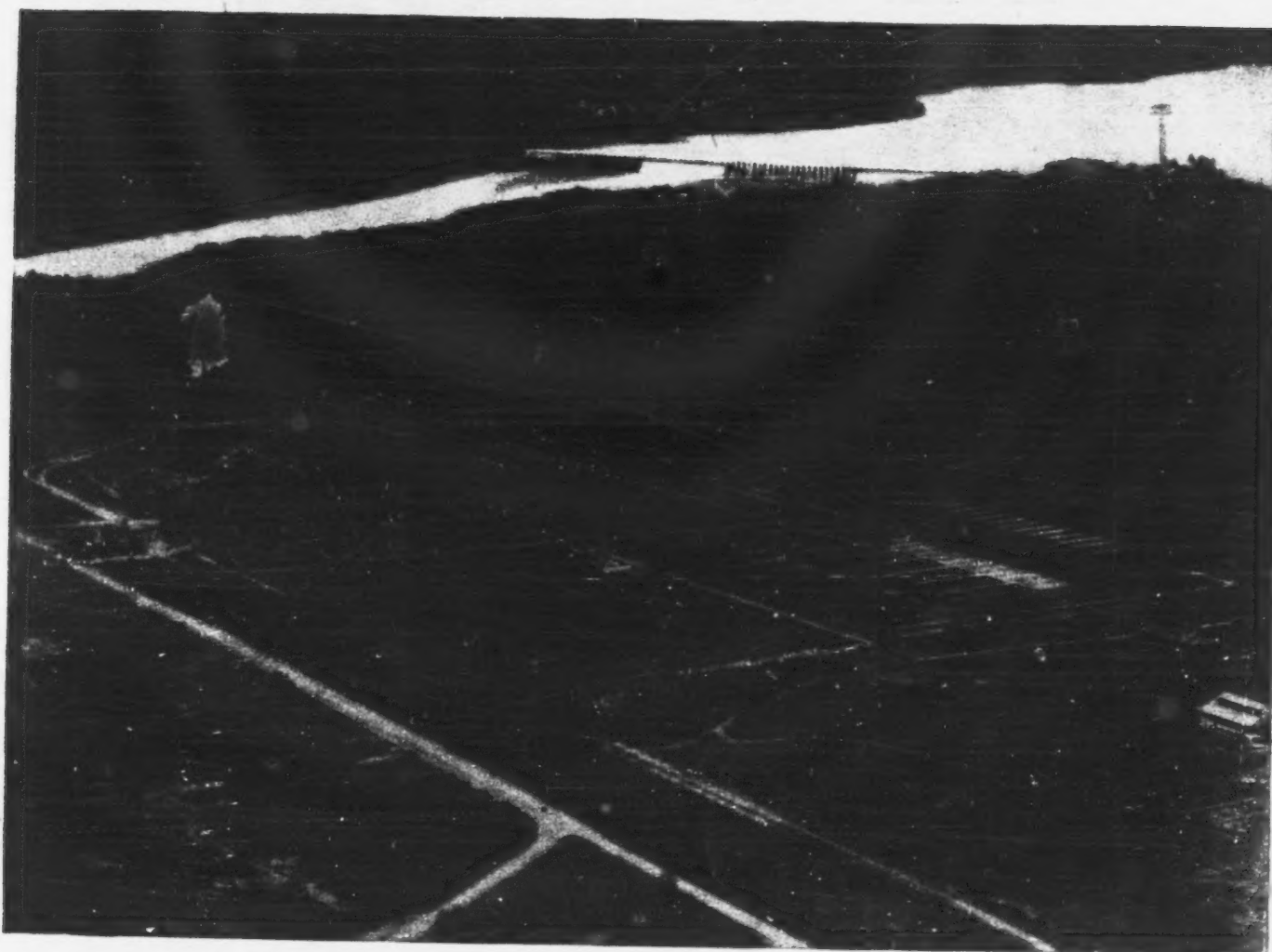
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The EHFA thus encourages the more widespread use of electricity by furnishing credit to purchasers of equipment on easy terms and by inducing manufacturers of equipment to put out low-cost, high-grade products. But it does not stop there. It cooperates with manufacturers and dealers in setting up displays, in providing cooking schools, which emphasize the use of electrical equipment, and, in every possible way, it works with manufacturers, dealers, and private power companies in popularizing the use of electricity. It is the hope of those in charge of the TVA and EHFA that, by furnishing cheap power and cheap electrical equipment and by bringing the advantages of the use of electricity to the attention of the people, great strides may be made toward the electrification of America.

At the present time the average consumption of electricity in the average American home is 50 kilowatt hours a month. In Ontario, where cheap power has long been distributed, the average use is 150 kilowatt hours. If American standards of electricity consumption can be brought to those of Canada, it will mean a tremendous stimulation of the electrical industry and a transformation of our ways of living. It will also mean the need for additional sources of electricity. The increased sales of electricity, in turn, will cheapen the cost of production, resulting in lower prices, and still more extensive electrification.

Looks to the Future

Government and Industry



An air view of the Nitrates Plant at Muscle Shoals, Alabama, with Wilson Dam in background

TVA photo

WHAT will the entry of the government into the field of electricity mean to the private power companies and to those whose funds are invested in public utility stocks and bonds? The answer frequently given is that nothing which the government might do is likely to cause investors in private utility companies greater loss than these investors have already suffered as a result of financial manipulations of such power

that direction. The private power companies may be forced, by government competition, to lower their rates also. Some of them have already cut their charges. These companies, like the TVA, may have greatly increased business and may make satisfactory profits thru mass production, even tho prices are cut. Perhaps the electrical industry may undergo a change similar to that which occurred in the cotton textile industry.

to operate on a similarly large scale. Private companies would have to obtain their own great river systems. Perhaps public opinion, however, would not permit such monopolistic use of river systems. It seems not improbable that, if the development of a chain of unified government-owned plants along the Tennessee River insures cheaper production of electric power, the people of the nation



TVA photo

THIS comparison of the old with the new shows how the standard of living is raised, ideas of beauty and utility cultivated, and the work lightened—think of the implications here for leisure-time activities!

THIS is the sort of thing the TVA is hoping to encourage thruout the Tennessee Valley region. In certain instances the result may be gained, as it has been at Spruce Pine, by working with cooperative associations. There is a fertile field for such efforts, especially in North Carolina. The Extension Division

of North Carolina University has been active for a long time in promoting cooperative associations among the farmers, and the people of that state appear ready to turn to such a form of organization. In other states the cooperative idea is less advanced and it will not be so easy to make headway along that road.

expert guidance and counsel.

In carrying out industrial plans for the Valley, the TVA will not rely by any means, however, upon cooperative associations. It is working also with private industry. The Division of Land Planning is determining the best uses of land in various sections. Plans are being made for the betterment of the transportation systems. The TVA is finding out what new industries might be developed and where they might profitably be located. Its chemists, for example, are studying processes for the use of coal not as a fuel but as a raw material. It is gaining a mass of information which will be useful in mapping out future industrial possibilities.

Manufacturers, large and small, will make use of this information. They will come to the TVA for advice about the locating of factories in the district. Already a considerable number of manufacturers are calling upon the Authority for counsel. The TVA thru its negotiations with these industrialists, will be able to exert a considerable influence in shaping the industrial life of the communities in this region. It may be able to do for the Valley what J. Fred Johnson did for Kingsport. It may be able to bring in industries which will conform to the principles of industrial development the TVA lays down. And the TVA will have in mind the development of industries which will furnish employment to the local inhabitants. The officials know that in each of the counties of rural Tennessee there are from 500 to 3000 persons who are not needed either by agriculture or by industry. The effort will be made to find employment for such persons and to keep a considerable number of them on the farms even after they are employed in the factories. Such local employment will bring with it, it is hoped, progress for the whole region rather than decadence in the rural sections, with alternating periods of prosperity and starvation in the cities.

The Production of Power

Stone, mineral resources, forests—all these are needed for the development of stable and prosperous conditions, and all of them are receiving the attention of the TVA. They are figuring in its plans. But something else is needed—electric power—and it, too, is figuring largely in plans for the Valley. As a matter of fact, the TVA today is spending more money and more energy on power development than on all the rest of its program. It is engaged in a great power project, harnessing the waters of the Tennessee and its tributaries for production on a great scale. It is utilizing these waters to develop an integrated system of power plants, which, when completed, will have capacity to generate more electricity than is now consumed in all the southeastern states.

This integrated system, all under the TVA unified control, consisting of a string of dams and generating plants, will place low-cost electricity at the service of the people. It will brighten millions of homes, on the farms as well as in the cities; it will lighten the burdens of domestic labor; it will stimulate industry. It may be a powerful tool in the hands of the industrial planners.

The first link in this chain of plants with which the Tennessee River system is to be harnessed has already been forged. The Wilson Dam and power

plant were built during the War. The TVA took them over in the summer of 1933. The dam is one of the largest in the world. It is nine-tenths of a mile long, 101 feet wide at the base, and it rises 107 feet above the base to the level of the lake which the dam creates. There are 58 spillways, each 38 feet wide. Any or all of these spillways may be opened, permitting the flow of water thru the dam. On the crest of the dam is a 20-foot highway across the river. Running parallel with the dam is the power house, nearly a quarter of a mile long and 145 feet wide. In this power house nine great turbines are installed and there is room for as many more. When this plant is fully equipped it will be capable of meeting the power needs of literally hundreds of towns.

But the Wilson Dam and power plant, located at Muscle Shoals, Alabama, must not be thought of as an isolated unit. It is a link in a chain, the other links being either under construction or under consideration. Up the river fifteen miles from Muscle Shoals, the Wheeler Dam is being built. The power plant at this dam, when completed, will have a capacity about half that of the plant at Wilson Dam. The Wheeler Dam will serve another purpose. It will be an aid to navigation. It will create a lake which will extend up the river for eighty miles, rendering the river navigable for that distance.

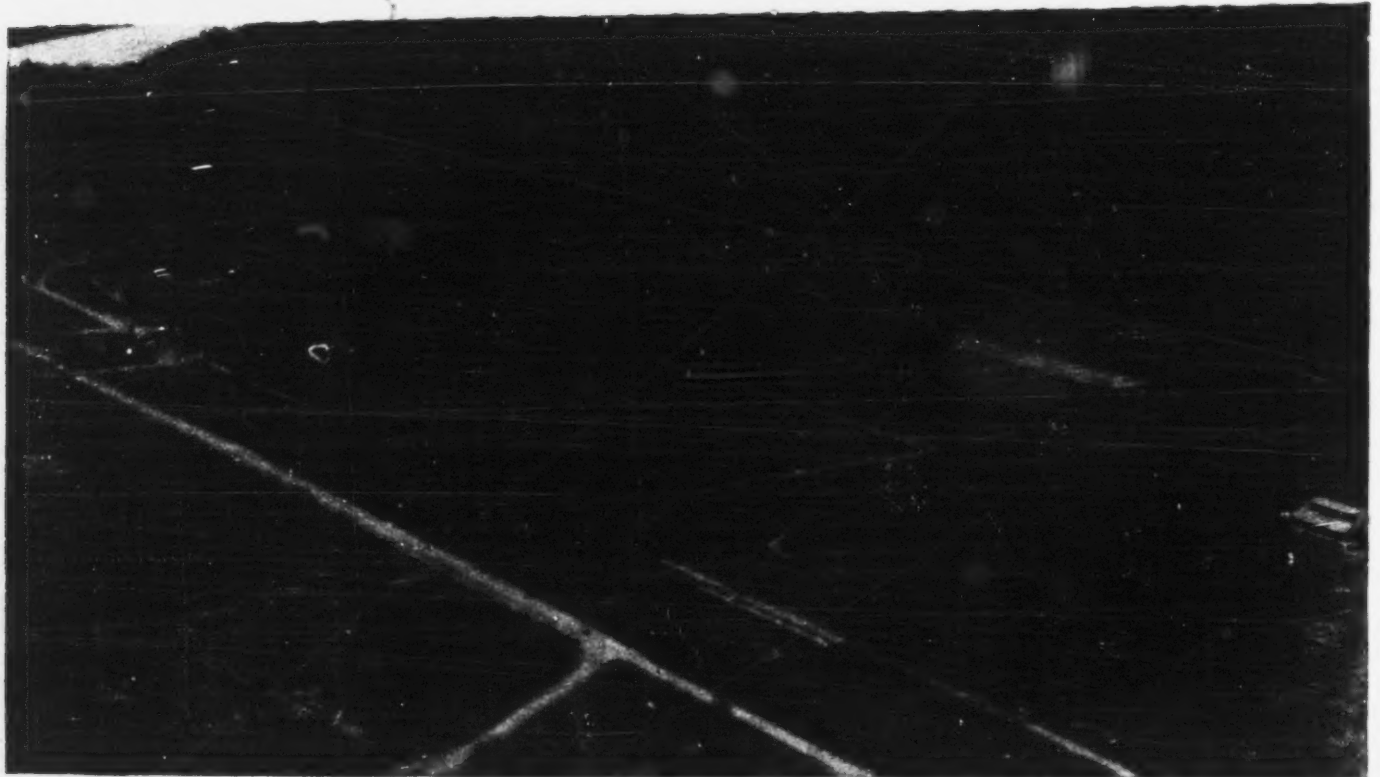
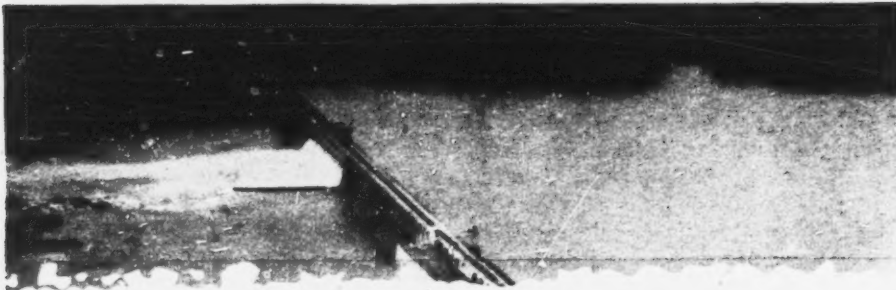
Locks are being built at the dam to allow boats to pass up and down the river.

A third link in the chain of dams is being built on the Clinch River, a tributary of the Tennessee, about 400 miles from Muscle Shoals. This is the Norris Dam, to which we referred a while ago. It is not so long as the one at Muscle Shoals but is much higher. It is a storage dam. It is being built chiefly for the purpose of holding back and storing the water of the river during the flood seasons—fall and spring—thus creating a lake. The lake will have an area of 83 square miles. During the dry season, when the river is ordinarily very low, the water will be released, generating power at Norris Dam and at every dam down the river. In addition, by regulating the river's flow, it will aid navigation.

The storing of the water during the rainy season will prevent floods down the river and will thus save lives and property. The operation of the Norris Dam will also increase the efficiency and productivity of the plant at Wilson Dam. During the rainy season the river is high and there is plenty of water. The power plant can run at capacity. But during the dry seasons the river is low and there is not enough water to keep the turbines going at capacity. Only about a fifth as much electricity can be produced during the dry season as can be generated when the river is high.

This is a serious matter, for a power plant cannot sell more electricity at any time than it can produce at *all* times. No city and no private firm will contract to buy power unless it can be assured that delivery will be made at all times.

The practical capacity of the Muscle Shoals plant is, therefore, only a fraction of the capacity which appears on paper. Norris Dam will regularize the flow of



An air view of the Nitrate Plant at Muscle Shoals, Alabama, with Wilson Dam in background

TVA photo

WHAT will the entry of the government into the field of electricity mean to the private power companies and to those whose funds are invested in public utility stocks and bonds? The answer frequently given is that nothing which the government might do is likely to cause investors in private utility companies greater loss than these investors have already suffered as a result of financial manipulations of such power magnates as Samuel Insull. This answer is probably true so far as it goes, but it does not cover the entire problem. Will the development of the TVA program, if successful, drive the private companies out of business? Can these companies stand competition from the government?

It is not easy to answer that question. The lower rates charged by the TVA may lead to a vast increase in power business. The indications, as we have seen, look in

that direction. The private power companies may be forced, by government competition, to lower their rates also. Some of them have already cut their charges. These companies, like the TVA, may have greatly increased business and may make satisfactory profits thru mass production, even tho prices are cut. Perhaps the electrical industry may undergo a change similar to that which occurred in the automobile industry when Henry Ford produced a cheap car and took automobiles out of the luxury class, into the class of large-scale production and use.

It is a fact, however, that the TVA is operating not a single power plant but a whole river system. The costs of generating water power may be lowered almost a half thru such large-scale operation. If that is true, it would seem that a private company, in order to compete with the government's rate, would be obliged

to operate on a similarly large scale. Private companies would have to obtain their own great river systems. Perhaps public opinion, however, would not permit such monopolistic use of river systems. It seems not improbable that, if the development of a chain of unified government-owned plants along the Tennessee River insures cheaper production of electric power, the people of the nation may insist that the government develop other chains of plants on other rivers.

Those who feel, therefore, that the TVA experiment looks toward the probable substitution of public for private production and sale of power have some grounds upon which to base their predictions. The directors of the TVA have said frankly that, while private business interests are given serious consideration, the TVA is chiefly concerned with the interests of the public.

The Future of Farms and Industry



SKILLED workmen at Kingsport Press—one of the largest printing establishments in the world.

IT SHOULD BE kept in mind that the TVA is trying to make life and happiness in the Tennessee Valley more secure. That is why it is surveying the region's resources and trying to save the forests and the soil; that is why it is developing a great power system. But in order to bring about economic security, the TVA planners must change the industrial set-up, or so they believe.

No one has known in the past what proportion of the Valley's workers should operate farms and what proportion should work in the factories. Neither the agricultural nor the manufacturing industry was organized according to plan. As a matter of fact, many farmers did not have a ready market for their products, partly because factories were not located near at hand. There were no local city workers to feed. The farmers had to sell their produce to distant markets and these markets were glutted. Conditions were equally unsatisfactory in the industrial centers. Employment was not stable and when workers lost their jobs they had no means of support.

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factory. They are not obliged to depend wholly upon commercial agriculture—upon selling their products to distant and undependable markets. Neither are the factory workers wholly dependent upon steady work in the factories. If the shops close down people living in the country have at least food and shelter, and they need not ask for help.

In seeking to promote the decentralization of industry, with a better balance between industry and agriculture, the TVA is not breaking new ground. It is not advocating a novel idea. It is merely throwing its influence behind a movement which has been under way in this section of the country for a quarter of a century. The coming of the automobile, making quick travel possible, and the building of good roads, helping the movement of workers and materials, have led factories to break away from crowded regions to go to small towns or villages. The use of electricity leads to the same result, for power can be carried long distances. Electricity plays such a large part in the decentralization of industry that the Tennessee Valley Authority may push that movement along at rapid rate once its plans for the cheap electrification of the Tennessee Valley area are realized. The planning for the future of industry which the Authority is doing is seen, therefore, to dovetail nicely into its power program.

We may be able to see more clearly the picture of future industrial development which the leaders of the TVA have in mind by examining certain communities which are already practising the decentralization idea. Let us take the cases, for example, of Tupelo and Corinth, Mississippi, two towns which are now buying their electricity from the TVA. In each of these towns there are small fac-

or his father or brother.

These farmers do not use their farms just for money crops. They do not raise cotton or anything else exclusively as many other southern farmers do. They look upon their farms largely as a place to raise food for themselves. Their money income is largely from the factory. Since they live on the farm they are not obliged to spend the greater part of their wages for rent and food so they can spend their money for other things and can have a higher standard of living. The houses and farms are wellkept and there are signs of comfort and progress. These small communities seem to have taken long steps toward the solving of their economic problems. They seem to have gone far toward the attainment of a way of life far more secure than that in most of the communities of the nation.

A different kind of situation is to be found in the industrial city of Kingsport, Tennessee. Where this remarkable town now stands, there were only bare hills and impoverished hillsmen twenty years ago. Then a railroad came thru the country and the company bought up a large tract of land on the present site of Kingsport and decided to develop an industrial center. The work of development was placed in the hands of a most unusual man, J. Fred Johnson. He conceived the idea of building a community which maintained truly humane and enlightened standards, a town where a high level of living might be insured. He went to experts for counsel. He called upon land planning authorities, among them Earle S. Draper, the present director of land planning and housing of the Tennessee Valley Authority, to lay out plans for the town. For a model municipal charter he went to the Rockefeller Institute of Municipal Research. For a school system he went to Columbia University for counsel. He brought in factories whose owners wanted to maintain high standards for workers. He brought in a rayon mill and a large branch of the Eastman Camera plant. One of the largest printing establishments in the world came to Kingsport. Careful attention was given

require the continued efforts of a generation. Forests cannot be restored in a day; soil cannot be refertilized; people cannot be brought suddenly into cooperative enterprises; nor can industrial habits be hurriedly changed.

No one can tell as yet to what extent the TVA vision will be realized. Much will depend upon the continued interest and support of the Valley people. At present the majority of them appear friendly, disposed to cooperate. The test will come when the novelty of the idea wears off, and when the absence of quick and tangible results of TVA efforts may try the popular patience. It is not enough that the people tolerate the Authority. They must follow its guidance actively if its purposes are to be achieved.

The TVA must expect active hostility at times from business groups who feel themselves adversely affected by its operations. If, as is clearly possible, the

tains its purpose to encourage industries which contribute to the public good and to discourage those which do not, it would be fatuous to suppose that it will not step on the toes of a good many very powerful business men. It would be equally fatuous to suppose that they will not strike back. But perhaps the TVA's most serious problems may come, not from outside opposition, but from the difficulty of the planning job itself. It is easy to plan on paper, but if plans for an extensive region are put into practise, it must be expected that unexpected obstacles will arise and that certain disharmonies may result. All of which is not to say that the TVA task is impossible, but merely that it is infinitely complicated and difficult.

No one expects, of course, that it will be an easy thing to help in the development of a new industrial society, to assist in the discovery of new ways of life, to

These engineers, land planners, agriculturists, social scientists, industrial technicians, are bending their energies, not, as in the case of war, toward the destruction of life, but toward the devising of means whereby thousands of families may live in greater comfort and security. About the offices of the TVA one senses an atmosphere of enthusiasm consistent with the size of the experiment in human welfare which is being made. Even the workmen engaged in the building of the great dams give evidence of a zeal such as one might expect of soldiers in a popular war. They appear to feel a sense of the dignity of the undertaking of which they are a part. Rarely has a constructive effort of peace time fired the imaginations and stirred the hopes of participants and spectators as has this experiment in economic and social planning which is under way in the Valley of the Tennessee.



The Tennessee River Basin, where "an experiment in human welfare" is being made

TVA photo

Power Policy

BUT WHAT IS the purpose of the TVA in going so heavily into the power business? David E. Lilienthal, one of the directors, answers that question. "The Tennessee Valley Authority Act," he says, "marks the beginning of a new national power policy and national power program. This new national policy has two major objectives. The first objective is more effective protection of the public interest, by the setting up of a measure of public operation of power as a 'yardstick.' The second objective of this new national policy is a greatly increased use of electricity in the homes, the farms, and the factories of the United States—an electrified America."

A yardstick to determine the fairness of rates charged by private power companies has long been needed. It has been almost impossible to find what rates were reasonable. Customers complained when they thought their bills were too high. Sometimes they took their grievances to state utility boards. Arguments were presented before the boards. The companies pointed to their heavy investments, their interest charges, costs of operation, taxes. They held that their profits were small. Representatives of consumers declared the companies were over-capitalized, that the financial interests owning the companies were wasteful, inefficient; that exorbitant salaries were paid and bonuses given to insiders.

When arguments of this sort are going on it is natural that both sides, the utilities on the one hand and consumer interests on the other, should try to control the bodies which regulate rates. The utility companies say that they must protect themselves against unjust regulation; that is, against what they consider to be unjust regulation. So they take a hand in politics. They seek to influence public opinion insofar as it relates to the

an atmosphere of confusion and propaganda cannot easily come to definite and generally accepted conclusions. The question as to what rates are fair remains undetermined.

Here is where the government steps in. When Congress created the TVA and defined its powers it said in effect: "We will settle this question of rates by a trial comparison; we will have the government generate, transmit, and sell electricity in a given region.

Acting thru the TVA, the government will manufacture the power as private companies do. It will charge against itself all the expense which it incurs, including taxes. It will sell the power to the same sort of customers to whom they sell. It will keep a careful record of its costs. It will find out how much it costs to produce and sell electric power. This action of the government will serve as a 'yardstick' by which to determine what the costs of production are and what prices are fair."

The TVA is authorized to use as much electricity as it needs in the development of its own projects. The surplus power will be sold. It will undertake to provide electricity to states, cities, and cooperative associations. These cooperatives may distribute electricity to towns or to farmers. The usual procedure is for the TVA to generate the electricity and send it over its own transmission lines to a town which is to use it. The town or city



TVA photo

GENERATORS in the great hall of Wilson Dam power house. This hall is 1197 feet long and 145 feet wide. Many feet below the generators are the giant rotors thru which the waters of the Tennessee are passed to manufacture cheap power for people in the region.

purposes, or it may sell its surplus to private power companies.

When the TVA makes a contract to sell electricity to a municipality which has been getting its power from a private company, the TVA offers to buy the company's equipment. It does not want to go into the community and build its own transmission lines, duplicating the equipment which the private company already has. Arrangements have already been made whereby the TVA has taken over the transmission lines previously owned by private companies in a number of counties of northern Alabama, northern Mississippi, and Tennessee. It is prepared, therefore, to furnish power to the communities of these areas. It is already serving several small cities and it has formed an agreement whereby it is to serve the larger city of Knoxville, Tennessee. It has purchased the equipment of the private power company with which

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The TVA is seeking a remedy for this situation. Those who are making the plans think the answer is decentralized industry. If factories were scattered among the small rural communities, they say, there would be a better balance between industry and agriculture. Farmers would have a local market for their food supplies. Not only would this give them better prices but it would encourage them to diversify their crops, raising more food products instead of relying wholly on one money crop such as cotton, corn, or tobacco.

These small factories might employ many members of farm families. These employees would live on the farms. Under such a system of industry and agriculture farmers have a living from their land and a money income from the

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to spend the greater part of well wages for rent and food so they can spend their money for other things and can have a higher standard of living. The houses and farms are wellkept and there are signs of comfort and progress. These small communities seem to have taken long steps toward the solving of their economic problems. They seem to have gone far toward the attainment of a way of life far more secure than that in most of the communities of the nation.

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Looks to the Future

Working with the Cooperatives

UP in the mountains of North Carolina there is another variety of development. Another community is being made over here, this time with the active support of the TVA. Spruce Pine is, or was, a typical mountain village. The people were very poor, for on the steep slopes they could raise no money crops and it was very difficult for them even to obtain a living from the soil. Acting individually they seemed condemned to the same meagre existence which characterizes the lives of most mountaineers thruout this region. A really effective leader, however, appeared among them, S. T. Henry—like Johnson of Kingsport, an unusual man. Henry is a graduate of Illinois University. He has had Wall Street experience. He has engaged in the publishing business. But years ago he went to Spruce Pine, built a little home on a mountain top, and identified himself with the community.

Under the leadership of Mr. Henry and with the help of the Tennessee Valley Authority, a cooperative association was formed. This association could not possibly have gained support had it not had the endorsement of the TVA, and it could not have carried on its work without loans and expert counsel from that quarter. This cooperative has developed a seed potato industry. It has put up canneries so that now the farmers have a market for their tomatoes and beans at the local canneries. The cooperative secures a market for these products. It turns out, however, that the canned goods which are manufactured in the locality are not all thrown upon the markets of the nation to add to the surplus of agricultural products. Much of the canned vegetables are consumed by the

Mr. Henry, knowing that the steep mountain slopes should be used as grass lands and should not be cultivated, is planning that the cooperative shall secure cheap fertilizers from the TVA and shall grow good grass on the hillsides. Then this land shall be taken out of cultivation and used as pasture land. Eventually, it is hoped that herds of cattle may be kept during the winter down in the valleys where corn and other concentrated forms of feed may be had, and driven to the mountain sides in the summer.

In the little town of Banner Elk, also in the North Carolina mountains, is Lees-

MacRae College. Here also a cannery cooperative and the seed potato cooperatives are at work. Further south, also in the North Carolina mountains, is the Campbell Folk School, similar to folk schools in Denmark. Here a dairy cooperative is at work, with a canning cooperative close by, both helped by the TVA. Half a dozen cooperatives, assisted by the TVA are in operation, and several more are being formed. They have thousands of members. In these little communities, as in the others we have spoken of, one feels that a new and better and more secure way of life is being discovered.



shows such foresight, such intelligence, such concern for the welfare of its citizens? Why should they not come to realize that no great and worthwhile thing is done without careful planning, and that the Tennessee Valley project is a gigantic demonstration of planning, a demonstration which is peculiarly needed at this juncture in the national life? Why should not the curriculum of the school reach out constantly for new materials that would help young people to understand and take part in matters of national policy which concern them vitally? Would not the school make a stronger appeal to youth and to the citizens who support it, if it contained at least 10 percent of new, more vital, experimental material, properly integrated with the best elements of the older curriculum? Cannot the curriculum be so arranged that every student will be studying some current activity, so that his powers of observance and analysis will be trained to look upon the passing scene?

Such questions as these were in the editor's mind, when the plan was made to work out in cooperation with the Tennessee Valley Authority, the story of what is being done in that great watershed. By a piece of good fortune, arrangement was made for Walter E. Myer, editor of the *American Observer*, and a gifted writer and student, to prepare the story. Try it in your classes. Perhaps it will help young people to realize that America has a great future, if it wills to have such a future.

This special feature in the fifteen pages preceding provides specific and abundant teaching material for a study unit based on one of the most significant developments now taking place in the United States. It can be used to vitalize the teaching of many school subjects. It will turn teachers' attention to a study of their own communities—their resources and needs. Perhaps most important, is the emphasis this special feature makes on the idea of planning and that a new and better civilization can and is being created in the Tennessee Valley, which

classroom teachers are farreaching.

School subjects with which this feature can be used—Geography, history, civics, current events, economics, sociology, geology, agriculture, forestry, general science, town and regional planning.

How this feature can be used in rural schools—The older children could use this feature in connection with geography, current events, and agriculture. An outline map of the United States might be used, locating on it important geographic names in this feature; the states, rivers, dams, towns. An imaginary trip by boat up the Tennessee River or by automobile thru this region is an opportunity for an interesting project. The children might contrast the effect of a few "money crops," as cotton, with the addition of new industries, as ceramics, which the TVA is seeking to develop. Also, in a region where pioneers like Daniel Boone once lived, pupils will see that the TVA is doing a truly heroic piece of pioneering in the interest of the public good. Lead the children to recall that this area has witnessed such battles as Shiloh and Lookout Mountain; but now the TVA is battling against desperate poverty, against further destruction of soil, forests, and watersheds to save a virile people and to lay the cornerstone for similar development elsewhere in the nation. Pupils in the Middlewest, where soil erosion because of winds during the 1934 drought has been heavy, might contrast the work being done in the Tennessee Valley with erosion measures in their own section. The use of electric power on farms and better housing for rural people are questions of intense interest to children, when applied to their own homes and lives. Children will enjoy making scrapbooks of pictures and newspaper clippings about the TVA.

Additional references—*American Forests*, October 1934 [special TVA number], 356. The *American Forestry Ass'n*, 1713 K St., Washington, D. C. [2] Write to the Tennessee Valley Authority, Knoxville, Tennessee, for material.



Courtesy, American Forestry Association.

GENERAL outline of the Tennessee River Basin. The shaded area indicates the sphere of development by the Tennessee Valley Authority.

the topics of this JOURNAL feature could be used for the subjects of talks by students. TVA activities could be dramatized: George W. Norris and the Senate debates on Muscle Shoals, President Roosevelt signing the TVA Act, etc.

[3] A program for a parent-teacher meeting given by students on the educational phases of the TVA: the modern school at Norris, the training of TVA personnel thru leisure-time opportunities, diversity of jobs, health examinations; the education of adults in home planning, use of modern conveniences, hygiene and sanitation, modern methods of agriculture. Include in such a program, Arthur E. Morgan's Antioch College work-study plan; also the educational aspects of the CCC.

[4] A TVA commencement program. The Knoxville, Tennessee, high school has already used the TVA as a theme for commencement. Students impersonated the three directors and other TVA workers; maps, a model of a mountain cabin, and a home in Norris were shown.

[5] Debate by students, the public invited, on the *laissez faire* policy vs. government planning, as shown in the TVA.

[6] Exhibits, for the entire school and the public, of maps, pictures, models of the town of Norris, mountain cabin, modern houses in Norris, "Then and Now" exhibits.

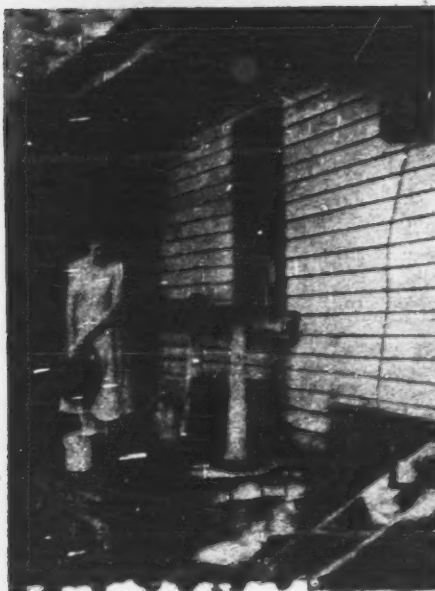
Additional references—See references above; also consult *Reader's Guide to Periodical Literature* [H. W. Wilson Co. N. Y.] in your library for titles of many magazine articles on the TVA.

Suggestions for colleges, including those for the education of teachers—This JOURNAL feature on the TVA may suggest several questions to which college students may wish to give intensive study. One of these may be city and regional planning. See *The New Exploration: A Philosophy of Regional Planning* by Benton Mackaye. [Harcourt, Brace & Co. N. Y. 1928. \$3.]; also *The Awakening Community* by Mary Mims. [Macmillan Co. N. Y. 1932. \$2.] Other questions students may well ask are: What are the rates for electric service in my community? How do these compare with charges in other communities of similar size? Under public ownership? Private ownership? Write to the Federal Power Commission, Washington, D. C., for information about rates for electric power thruout the country; also to the Dominion Waterpower and Hydro-Electric Bureau, Ottawa, for rates in Canada. Among the many books on electric power, are: *The Power Age* by Walter N. Polakov [Covici, Friede] 1933, \$2. *What Electricity Costs* by Morris L. Cooke. 1933. New Republic. 421 W. 21st, New York. \$1.

[2] Summer camping trips to the Tennessee Valley for classes in regional planning, rural economics, geology, sociology, forestry, will be profitable and enjoyable in preparation and in actuality.—Joy Elmer Morgan.

The Tennessee Valley

Planning the Industrial Future



Everywhere, however, cooperation for the purpose of developing a planned community life will be encouraged. A special organization, the Tennessee Valley Associated Cooperatives, Inc., an agency of the TVA, is working to that end. It is making loans to cooperative associations when necessary and it is offering expert guidance and counsel.

In carrying out industrial plans for the Valley, the TVA will not rely by any means, however, upon cooperative associations. It is working also with private industry. The Division of Land Planning is determining the best uses of land in various sections. Plans are being made for the betterment of the transportation systems. The TVA is finding out what new industries might be developed and where they might profitably be located. Its chemists, for example, are studying processes for the use of coal not as a fuel but as a raw material. It is gaining a mass of information which will be useful in mapping out future industrial possibilities.

Manufacturers, large and small, will make use of this information. They will come to the TVA for advice about the locating of factories in the district. Already a considerable number of manufacturers are calling upon the Authority for counsel. The TVA thru its negotiations with these industrialists, will be able to exert a considerable influence in shaping the industrial life of the communities in this region. It may be able to do for the Valley what J. Fred Johnson did for Kingsport. It may be able to bring in industries which will conform to the principles of industrial development the TVA lays down. And the TVA will have in mind the development of indus-

Looks to the Future

What to Expect

WE HAVE spoken now of the plans and the achievements of the Tennessee Valley Authority. The plans naturally bulk larger than the achievements. The TVA, after all, is but a little more than a year old, and much of the work it has laid out for itself will require the continued efforts of a generation. Forests cannot be restored in a day; soil cannot be refertilized; people cannot be brought suddenly into cooperative enterprises; nor can industrial habits be hurriedly changed.

No one can tell as yet to what extent the TVA vision will be realized. Much will depend upon the continued interest and support of the Valley people. At present the majority of them appear friendly, disposed to cooperate. The test will come when the novelty of the idea wears off, and when the absence of quick and tangible results of TVA efforts may try the popular patience. It is not enough that the people tolerate the Authority. They must follow its guidance actively if its purposes are to be achieved.

The TVA must expect active hostility at times from business groups who feel themselves adversely affected by its operations. If, as is clearly possible, the

dominance of the private power companies in the utility field is seriously challenged by the TVA, the companies may throw their great influence into the scales against the practise of governmental competition. Other industrial interests will have their grievances. If the TVA maintains its purpose to encourage industries which contribute to the public good and to discourage those which do not, it would be fatuous to suppose that it will not step on the toes of a good many very powerful business men. It would be equally fatuous to suppose that they will not strike back. But perhaps the TVA's most serious problems may come, not from outside opposition, but from the difficulty of the planning job itself. It is easy to plan on paper, but if plans for an extensive region are put into practise, it must be expected that unexpected obstacles will arise and that certain disharmonies may result. All of which is not to say that the TVA task is impossible, but merely that it is infinitely complicated and difficult.

No one expects, of course, that it will be an easy thing to help in the development of a new industrial society, to assist in the discovery of new ways of life, to

participate in the reshaping of a civilization. But this much can be said:

The job is being undertaken with a calm determination, with an efficiency of organization, with a spirited enthusiasm, which reminds one of William James' vision of "a moral equivalent of war." These engineers, land planners, agriculturists, social scientists, industrial technicians, are bending their energies, not, as in the case of war, toward the destruction of life, but toward the devising of means whereby thousands of families may live in greater comfort and security. About the offices of the TVA one senses an atmosphere of enthusiasm consistent with the size of the experiment in human welfare which is being made. Even the workmen engaged in the building of the great dams give evidence of a zeal such as one might expect of soldiers in a popular war. They appear to feel a sense of the dignity of the undertaking of which they are a part. Rarely has a constructive effort of peace time fired the imaginations and stirred the hopes of participants and spectators as has this experiment in economic and social planning which is under way in the Valley of the Tennessee.

COMPLAINANTS' EXHIBIT No. 641 (Excluded)

lieve it is for the municipal applicant to determine whether or not it desires to compete with privately owned utilities. It is our policy to consider such applications particularly where franchises are soon to expire, provided the project is self-liquidating at rates lower than those which the existing utility is willing to put into effect."

[fol. 3172] COMPLAINANTS' EXHIBIT No. 642 (Excluded)**Federal Emergency Administration of Public Works**

PWA Press Section, Release Sunday, December 30, 1934

Release No. 1165

The President has written letters to Governors or Governors-elect in the forty-eight States offering the assistance of the Public Works Administration in the preparation of legislation which would enable municipalities and other public bodies to obtain fuller benefits of whatever additional public works program is authorized at the coming session of Congress.

The President submitted to the States for their consideration general suggestions covering the simplification of procedure for bond issues, the delegation of greater powers to municipalities to issue bonds, slum-clearance and low-cost housing, rural electrification, and creation of municipal improvement authorities.

The Legal Division of PWA, which already has assisted a number of States at their request in the preparation of legislation designed to facilitate and expedite the public works program, was designated by the President as the Federal agency which upon invitation will assist the States in the [fol. 3173] formulation of their legislative programs.

The following letter is typical of those sent out by the White House:

The White House, Washington

MY DEAR GOVERNOR:

In the event that an additional public-works program is authorized at the coming session of the Congress, I should

COMPLAINANTS' EXHIBIT No. 642 (Excluded)

like to see the municipalities of your State legally able to take full advantage of such a program. With this in mind, I have instructed Administrator Ickes to place at your disposal the Legal Division of the Public Works Administration for the purpose of suggesting bills which if enacted into law would enable municipalities of your State to secure the benefits of this phase of the recovery program.

Our experience in the past eighteen months has brought to light the difficulty of gearing the legal machinery which has served municipalities of your State adequately for decades to the speed with which the Federal Government must extend credit to achieve desired results. It has been found that revision of the procedure relative to municipal financing is essential, at least for the duration of the exist-[fol. 3174] ing emergency. I wish to submit for your consideration in formulating your legislative program, the following general suggestions:

(1) Simplification of the procedure for the authorization and financing by municipalities of public-works projects, for example, by eliminating the requirement for an election and in lieu thereof substituting a permissive referendum on bond issues, by shortening the periods of notices before such referendum elections, and by permitting the sale of bonds privately to the Federal Government.

(2) Conferring of additional powers upon municipalities to undertake public-works projects and issue bonds to finance the same, including the relaxing of statutory limitations upon taxing power to pay debts, and the delegation of a broader authority to municipal officials to make such contracts with the Federal Government as are deemed in the best interests of the municipality.

(3) Creation of municipal improvement authorities without power to tax, but with power to issue bonds payable solely from the income of revenue-producing improvements, such as water, sewer, and electric light and power systems.

(4) Authorizing municipalities to engage in slum clearance, including condemnation of necessary lands, and the construction, operation and maintenance of low-cost housing, to make contributions therefor, and to enter into con-

COMPLAINANTS' EXHIBIT No. 642 (Excluded)

tracts with the Federal Government in connection therewith.

(5) Providing for the creation of non-profit public benefit [fol. 3175] corporations or agencies to provide for the electrification of rural communities with the assistance of the Federal Government.

(6) Validation of bonds and other obligations heretofore issued by municipalities for public-works projects and sold to the Federal Government.

If you will write me how you feel about these suggestions, I will request Administrator Ickes to have prepared such bills as may be deemed advisable.

Quite apart from the above suggestions, I think it would be helpful if arrangements could be made whereby the Public Works Administration is furnished with copies of all laws enacted at the forthcoming legislative session. This will materially aid the Administration in advancing funds on approved projects.

Very sincerely,

Franklin D. Roosevelt.

[fol. 3176] COMPLAINANTS' EXHIBIT No. 643 (Excluded)

Federal Emergency Administration of Public Works

PWA Press Section, Immediate Release

Release No. 1396

An allotment of \$125,000 to the Federal Power Commission to continue the electric rate survey and the national power survey was announced today by Public Works Administrator Harold L. Ickes.

Of the amount, \$25,000 will be used for a tabulation and analysis of an investigation of rates paid for electric light and power by Federal agencies and institutions; \$25,000 for a special field investigation of the power requirements and power resources in the area that may be served by the Tennessee Valley Authority, and \$75,000 for the completion and publication of studies, maps and charts now in the course of preparation by the Federal Power Commission.

The Tennessee Valley Looks to the Future

A Study Unit: Suggestions About Its Use

SOMEDAY students of American history will read about the development of the Tennessee Valley as one of the great events in the life of the Republic. Why should not today's students study this great development while the building is actually going on? Why should they not learn to be proud of the nation that shows such foresight, such intelligence, such concern for the welfare of its citizens? Why should they not come to realize that no great and worthwhile thing is done without careful planning, and that the Tennessee Valley project is a gigantic demonstration of planning, a demonstration which is peculiarly needed at this juncture in the national life? Why should not the curriculum of the school reach out constantly for new materials that would help young people to understand and take part in matters of national policy which concern them vitally? Would not the school make a stronger appeal to youth and to the citizens who support it, if it contained at least 10 per cent of new, more vital, experimental material, properly integrated with the best elements of the older curriculum? Cannot the curriculum be so arranged that every student will be studying some current activity, so that his powers of observance and analysis will be trained to look upon the passing scene?

Such questions as these were in the editor's mind, when the plan was made to work out in cooperation with the Tennessee Valley Authority, the story of what is being done in that great watershed. By a piece of good fortune, arrangement was made for Walter E. Myer, editor of the *American Observer*, and a gifted writer and student, to prepare the story. Try it in your classes. Perhaps it will help young people to realize that America has a great future,

is possible in other sections of our country. The potential public usefulness of the entire Tennessee Valley "enters the wide fields of flood control, soil erosion, afforestation, elimination from agricultural use of marginal lands, and distribution and diversification of industry." The implications of all this for education and classroom teachers are far-reaching.

School subjects with which this feature can be used—Geography, history, civics, current events, economics, sociology, geology, agriculture, forestry, general science, town and regional planning.

How this feature can be used in rural schools—The older children could use this feature in connection with geography, current events, and agriculture. An outline map of the United States might be used, locating on it important geographic names in this feature; the states, rivers, dams, towns. An imaginary trip by boat up the Tennessee River or by automobile thru this region is an opportunity for an interesting project. The children might contrast the effect of a few "money crops," as cotton, with the addition of new industries, as ceramics, which the TVA is seeking to develop. Also, in a region where pioneers like Daniel Boone once lived, pupils will see that the TVA is doing a truly heroic piece of pioneering in the interest of the public good. Lead the children to recall that this area has witnessed such battles as Shiloh and Lookout Mountain; but now the TVA is battling against desperate poverty, against further destruction of soil, forests, and watersheds to save a virile people and to lay the cornerstone for similar development elsewhere in the nation. Pupils in the Midwest, where soil erosion because of winds during the 1934 drought has been heavy, might contrast the work being done in the Tennessee Valley with erosion measures in their own section. The use of electric power on farms and better housing for rural people are questions of intense interest to children, when applied to their own homes and lives. Children will enjoy making scrapbooks of pictures and newspaper clippings about the TVA.

Additional references—*American Forests*, October 1934 [special TVA number]. 35¢. The American Forestry Ass'n. 1713 K St., Washington, D. C. [2] Write to the TVA, see V. 11

[3] Write to U. S. Department of Agriculture, Washington, D. C., or to your state department of agriculture for bulletins on soil erosion, forestry, etc.

Suggestions for junior and senior high schools—Scrapbooks of pictures and newspaper articles, outline and relief maps, imaginary trips to the Tennessee Valley will be enjoyed in many classes.

[2] Special TVA assembly program in which the topics of this JOURNAL feature could be used for the subjects of talks by students. TVA activities could be dramatized: George W. Norris and the Senate debates on Muscle Shoals, President Roosevelt signing the TVA Act, etc.

[3] A program for a parent-teacher meeting given by students on the educational phases of the TVA: the modern school at Norris, the training of TVA personnel thru leisure-time opportunities, diversity of jobs, health examinations; the education of adults in home planning, use of modern conveniences, hygiene and sanitation, modern methods of agriculture. Include in such a program, Arthur E. Morgan's Antioch College work-study plan; also the educational aspects of the CCC.

[4] A TVA commencement program. The Knoxville, Tennessee, high school has already used the TVA as a theme for commencement. Students impersonated the three directors and other TVA workers; maps, a model of a mountain cabin, and a home in Norris were shown.

[5] Debate by students, the public invited, on the *laissez faire* policy vs. government planning, as shown in the TVA.

[6] Exhibits, for the entire school and the public, of maps, pictures, models of the town of Norris, mountain cabin, modern houses in Norris, "Then and Now" exhibits.

Additional references—See references above; also consult *Reader's Guide to Periodical Literature* [H. W. Wilson Co. N. Y.] in your library for titles of many magazine articles on the TVA.

Suggestions for colleges, including those for the education of teachers—This JOURNAL feature on the TVA may suggest several questions to which college students may wish to give intensive study. One of these may be city and regional planning. See *The New Exploration: A Philosophy of Regional Planning* by Benton Mackaye. [Harcourt, Brace & Co. N. Y. 1928. \$3.]; also *The Awakening Community* by Mary Mims. [Macmillan Co. N. Y. 1932. \$2.] Other questions...

COMPLAINANTS' EXHIBIT No. 643 (Excluded)

These studies include rural electrification, the cost of the distribution of electricity and economics of interconnection and coordination. They are of great practical value.

[fol. 3177] The tabulation and analysis of rates was requested by the Procurement Division, of the Treasury Department, to be used in connection with negotiations for light and power contracts for the next fiscal year. The field investigation in the TVA area will be of use to TVA.

The original investigations by the Federal Power Commission, financed by a PWA allotment, were authorized by the Senate and by executive order.

[fol. 3178] COMPLAINANTS' EXHIBIT No. 644 (Excluded)

Federal Emergency Administration of Public Works

November 8, 1933.

To State Engineers:

A number of inquiries have come in to me regarding our attitude and procedure in regard to applications for loans for municipal light plants. I have prepared the present letter to set forth my views.

It seems to me that we should do all in our power to prevent becoming embroiled in local political disputes. I think it is going a bit too far and creates an unnecessary amount of work to notify all the utility companies when a municipal utility application comes in. Isn't it a fact that when you hear one argument you hear all of them? In principle they are the same. After all, the question for you to decide is one of whether or not it is engineeringly, economically and socially sound.

The entire procedure of the utility company is one of delay. You find this everywhere. We are most anxious to set up around the country sound publicly owned utilities as yard-sticks to determine the principle of whether or not communities can satisfy themselves and give lowered rates [fol. 3179] for electricity.

Where you do find it necessary to have a hearing, both sides, of course, should be present. I cannot see why it is necessary for the utilities to get into the whole file. If you

COMPLAINANTS' EXHIBIT No. 644 (Excluded)

do this you immediately get into a three-cornered engineering discussion, the utilities, the applicant and ourselves. As far as the engineering is concerned I don't think it is any of the utilities business. Your engineering force, together with the engineering which has been done by the applicant and which will be checked here, is sufficient.

If the utility desires to file a brief or be heard, and you decide it is necessary and advisable to do so, you can give them enough of the facts on which they can prepare their brief.

H. M. Waite, Deputy Administrator.

P. W. 1073.

[fol. 3180] COMPLAINANTS' EXHIBIT No. 645 (Excluded)

President's Letter Creating the National Power Policy Committee

Establishment by the President in the Public Works Administration of a Committee called the "National Power Policy Committee" was announced today at the White House. (July 16, 1934.)

Secretary Ickes will be Chairman of this Committee, the membership of which will be composed of:

Dr. Elwood Mead, of the Bureau of Reclamation,
Honorable Frank R. McNinch, of the Federal Power Commission,

Honorable Morris L. Cooke, of the Mississippi Valley Committee, PWA,

Major General Edward M. Markham, Chief of Engineers, War Department,

Honorable Robert E. Healy, of the Federal Stock Exchange Commission,

Honorable David E. Lilienthal, of the Tennessee Valley Authority,

Honorable T. W. Norcross, Assistant Forrester of the Forest Service.

In the following letter from the President to Secretary Ickes under date of July ninth the purpose and duties of this Committee are outlined:

"I wish to establish in the Public Works Administration a Committee to be called the "National Power Policy Com-

COMPLAINANTS' EXHIBIT No. 645 (Excluded)

[fol. 3181] mittee." Its duty will be to develop a plan for the closer cooperation of the several factors in our electrical power supply—both public and private—whereby national policy in power matters may be unified and electricity be made more broadly available at cheaper rates to industry, to domestic and, particularly, to agricultural consumers.

"Several agencies of the government, such as the Federal Power and Trade Commissions, have in process surveys and reports useful in this connection. The Mississippi Valley Committee of Public Works is making studies of the feasibility of power in connection with water storage, flood control and navigation projects. The War Department and Bureau of Reclamation have under construction great hydro-electric plants. Representatives of these agencies have been asked to serve on the Committee. It is not to be merely a fact-finding body, but rather one for the development and unification of national power policy.

"As time goes on there undoubtedly will be legislation on the subject of holding companies and for the regulation of electric current in interstate commerce. This committee should consider what lines should be followed in shaping up this legislation. Since a number of the States have commissions having jurisdiction over intrastate power matters, it is necessary that whatever plan is developed should have regard to the powers of these various State commissions as well as of the States in general.

[fols. 3182-3208] "It is not thought that it will be necessary to have frequent meetings of the full Committee. An adequate administrative staff will be provided, and personal expenses of the members of the Committee in connection with its meetings will be met.

"The Committee is to be advisory to the President. I hope that you will accept membership on this Committee and act as its Chairman."

[fol. 3160] COMPLAINANTS' EXHIBIT No. 636

No such Exhibit number.

[fol. 3161] COMPLAINANTS' EXHIBIT No. 637 (Excluded)

Federal Emergency Administration of Public Works

Release No. 44

Room 6013—Interior Department

Release August 8

An allotment of \$400,000 from public works funds to the Federal Power Commission was announced today by Public Works Administrator Harold L. Ickes.

The Power Commission, under the direction of President Roosevelt, will prepare a comprehensive national plan for the development of water power and the transmission of electricity, examine public works power projects referred to it by the Public Works Administration and make a study into the costs of the transmission of electricity from generating stations to consumers.

The allotment will enable the Commission to begin its investigations and studies at once.

The determination of facts with regard to the cost of transmitting and distributing electricity to consumers under varying conditions is of great importance not only in ascertaining the economic feasibility of power projects but also the distribution cost element properly to be included in rates to consumers of electricity.

Such an investigation was ordered by the Senate at the last session through a resolution introduced by Senator [fol. 3162] Costigan, of Colorado.

National planning of water power development, the Federal Power Commission advises the Public Works Administration, will effectuate the purposes of Congress, which in the Federal Water Power Act of 1920, authorized the commission to investigate "the water power industry and its relation to other industries and to interstate or foreign commerce, and concerning the location, capacity, development costs, and relation to markets of power sites, and whether the power from Government dams can be advan-

COMPLAINANTS' EXHIBIT No. 637 (Excluded)

tageously used by the United States for its public purposes, and what is fair value of such power, to the extent the Commission may deem necessary or useful for the purpose of this act."

The Federal Power Commission points out that up to the present time the development of the water power resources of the United States, both public and private, has been carried on without reference to any comprehensive or integrated national plan. As a result, there have been many instances in which the full economic and social value of the Nation's resources has not been secured. In other cases there has been a lack of proper coordination between projects developed in the same region. Power projects have also sometimes been developed without proper regard for the available market to consume the electricity generated. The failure to develop a national power program has therefore resulted in great economic loss.

It is planned to organize the work on a regional basis so that local projects under the Public Works Administration [fol. 3163] may receive prompt consideration. Making use of the trained personnel and facilities of the Power Commission will obviate the necessity of setting up a new organization for this purpose within the Public Works Administration.

In the preparation of the national plan the Federal Power Commission will cooperate with the Public Service Commissions of the several States, as well as with the Public Works Administration, the Tennessee Valley Authority and leading authorities of the electrical industry throughout the United States.

The Federal Power Commission is composed of Frank R. McNinch, of North Carolina, Chairman; Basil Manley, of the District of Columbia, Vice Chairman; Herbert J. Drane, of Florida; Claude J. Draper, of Wyoming, and George Otis Smith, of Maine.

[fol. 3164] COMPLAINANTS' EXHIBIT No. 638 (Excluded)

PWA Press Release No. 468

(Omitted)

[fol. 3165] COMPLAINANTS' EXHIBIT No. 639 (Excluded)

Federal Emergency Administration of Public Works

PWA Press Section, Immediate Release

Release No. 709

A Public Works Administration Electric Power Board of Review has been established Public Works Administrator Harold L. Ickes today announced.

This board will be comprised of Henry T. Hunt, General Counsel of BWA, Morris L. Cooke, Chairman of the Mississippi Valley Committee, and Otto M. Rau, Counselor for the Administrator. Mr. Cooke is a Pennsylvania authority on power development and Mr. Rau is a qualified expert on utilities costs and operations.

It will be the duty of this board to review disapprovals and special conditions imposed by any division of PWA and to make recommendations to the Deputy Administrator with regard to applications of public bodies to finance the construction, repair, improvement or extension of electrical power plant facilities.

Because of the wide variety of conditions under which such applications are made the controversial nature of certain of the projects and the important economic factors involved in the general questions of power development, Administrator Ickes has decided such projects should receive the attention of the new review board comprised of men who have made detailed studies of the issues involved and who are fully informed on various developments in this field.

The Administrator ordered the Technical Board of Review and the Projects Division of PWA to refer such applications to the Electric Power Board of Review.

The Administrator directed the power board to formulate and submit instructions for the guidance of various PWA divisions with regard to controversial questions affecting this class of projects so that uniform policies and handling of these questions might be evolved.

3512

[fol. 3167] COMPLAINANTS' EXHIBIT No. 640 (Excluded)

PWA Press Release No. 868

(Omitted)

[fol. 3168] COMPLAINANTS' EXHIBIT No. 641 (Excluded)

Federal Emergency Administration of Public Works

PWA Press Section, Immediate Release

Release No. 989

Achievement in certain instances of the administration purpose of making electric energy more widely available at cheaper rates today lead to a clarification of the policy on power by the Public Works Administration.

Municipal or local publically owned power projects will be aided by PWA only when, in addition to meeting those qualifications necessary for public works projects, they assure electricity to communities at rates substantially lower than otherwise obtainable under the unchanged basic policy enunciated by Public Works Administrator Ickes.

The statement of Administrator Ickes followed action by some privately owned utilities, which, on reexamination of their condition, found it possible to reduce rates to a point below those proposed by municipal project plants.

In all allotments made for municipal power plants by the [fol. 3169] Public Works Administration proposed rates have been well below existing private company rates. Consequently, the fact that the companies in some instances have met these proposed municipal rates has been deemed as showing progress toward one of the aims of this phase of the public works program.

In the cases affected Public Works Administration policy will be so administered that municipal plant construction will not be deprived of the possibility of public works support until such time as the local Government feels assured the proposed rate reduction by the existing utility will be in effect on a reasonably permanent basis.

Since the public works program began financing electric plants, where they are socially desirable and where they will be self-liquidating, there have been reductions of rates

COMPLAINANTS' EXHIBIT No. 641 (Excluded)

by private utilities in different localities. The private utilities are becoming increasingly cognizant of the greater use of power resulting from lower rates.

Administrator Ickes said:

"PWA has endeavored to make electric energy more broadly available at cheaper rates by acting on applications of municipalities for loans and grants to finance municipal systems where reasonable security is offered and the project is socially desirable. They are deemed desirable where the loan can be amortized in a reasonable period while charging rates substantially lower than those of the existing utility.

"However, we make it a practice before approving the loan to give the company an opportunity to put in effect rates at least as low as those at which the municipal system will be self-liquidating. Several utility companies have accepted this opportunity. It is obvious that in such cases it is advantageous to the city and to PWA that the offer be accepted and the applications withdrawn. To make loans and grants to finance projects where the competitor offers rates which are lower than those possible by the city plant, would duplicate facilities without any social betterment and impose on the city a burden which it probably could not meet without resort to taxation.

"Furthermore, in the described situation Public Works will be free to use its funds to better advantage elsewhere. The action of the utility companies referred to supports the belief that domestic rates, in certain instances at least, are so high as to be disadvantageous to the company as well as unjust to the consumers. Experience shows that lower rates may produce larger profits particularly (p-2) where promotional campaigns are conducted and the cost of electrical appliances is made reasonable.

"PWA will cooperate with cities to prevent rates rising on an indication municipal plants may not be built. PWA will not rescind allotments or suggest the withdrawal of applications until the lowered rates are legally in effect. [fol. 3171] "State laws authorize municipal competition, hence it is PWA's position that the State has determined that such competition may be socially desirable. We be-

COMPLAINANTS' EXHIBIT No. 647 (Excluded)

gives to the government, viz., the people, that same very essential "birch rod" in the cupboard.

* * * The water power of the State should belong to all the people. The title to this power must rest forever in the people. No commission—not the Legislature itself—has any right to give, for any consideration whatever, a single potential kilowatt in vital perpetuity to any person or corporation whatever. It is the duty of our representative bodies to see that this power is transferred into useable electrical energy and distributed at the lowest possible cost. It is our power, and no inordinate profits must be allowed to those who act as the people's agent in bringing this power to their homes and workshops.

* * * Here you have the clear picture of four great government power developments in the United States, the St. Lawrence River in the Northeast, Muscle Shoals in the Southeast, the Boulder Dam project in the Southwest, and, [fol. 3224] finally, but by no means the least of them, the Columbia River in the Northwest. Each one of these will be forever a national yardstick to prevent extortion against the public and to encourage the wider use of that servant of the people—electricity.

The power issue, where vigorously handled in the public interest, means abundant and cheaper current for American Industry, reduced rates and increased use in millions of urban and rural homes, and preservation of our water power resources in coordination with flood control reclamation and irrigation.

* * * My distinguished opponent is against giving the Federal Government in any case the right to operate their own power business.

I favor giving the people this right where and when it is essential to protect them against inefficient service or exorbitant charges.

As an important part of this policy, the natural hydroelectric power resources belonging to the people of the United States or the several States shall remain forever in their possession.

* * * Never shall the Federal Government part with its sovereignty and control over its power resources while I am President of the United States.

COMPLAINANTS' EXHIBIT No. 647 (Excluded)

[fol. 3225]

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"Looking Forward" by Franklin D. Roosevelt

March, 1933.

The Power Issue

The power issue, where vigorously handled in the public interest, means abundant and cheaper power for American industry, reduced rates and increased use in millions of urban and rural homes—to say little of the preservation of our water power resources in coordination with flood control, reclamation and irrigation. The American people have a vital stake in the proper handling of this issue.

Let us be clear at the outset that the liberty of individuals to carry on their business should be *be* abrogated unless the larger interests of the many are concerned. It is the purpose of government to see that not only the legitimate interests of the few are protected but that the welfare and rights of the many are conserved. These are the principles which must be remembered in any consideration of this question. This, I take it, is sound government—not politics. Those are the essential basic conditions under which the government can be of service.

The regulation commission must be a tribune of the people, putting its engineering, accounting and legal resources [fol. 3226] into real use for the purpose of getting the facts and doing justice to both the consumers and the investors in public utilities. This means positive and active protection of the public against private greed.

Therefore I lay down the following principle: that where a community or a district is not satisfied with the service rendered or the rates charged by a private utility, it has the undeniable right as one of its functions of government, one of its functions of home rule, to set up, after a fair referendum has been taken, its own governmentally owned and operated service.

This right has been recognized in most of the states of the Union. Its general recognition by every state will hasten the day of better service and lower rates.

State-owned or Federal-owned power sites can and should properly be developed by government itself. When so

COMPLAINANTS' EXHIBIT No. 647 (Excluded)

developed, private capital should be given the first opportunity

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F. D. R.—“Looking Forward”

March, 1933.

to transmit and distribute the power on the basis of the best service and the lowest rates to give a reasonable profit only.

As an important part of this policy, the natural hydroelectric power resources belonging to the people should remain forever in their possession. This policy is as radical as American liberty, as radical as the Constitution of the United States. Never shall the Federal Government part with its sovereignty and control over its power resources while I am President of the United States.

Holding Companies.

We must have uniform accounting systems.

Stockholders in holding companies, on suitable representation, must have the right at any time to examine the transcript of every word that is said at a directors' meeting.

A stockholder must have the right to examine every company contract—be it with officers or directors or with other companies.

Reports of holding companies must show actual ownership in shares and changes of ownership by officers and directors.

With the knowledge that such information can at any time become public many holding company irregularities would automatically cease.

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“On Our Way” by Franklin D. Roosevelt

1934

[fol. 3228] There is, however, an obligation upon us to insist that every issue of new securities to be sold in interstate commerce shall be accompanied by full publicity and information, and that no essentially important element attending the issue shall be concealed from the buying public.

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P. W. 22982

Message of President Roosevelt

April 10, 1933.

The continued idleness of a great national investment in the Tennessee Valley leads me to ask the Congress for legislation necessary to enlist this project in the service of the people.

It is clear that the Muscle Shoals development is but a small part of the potential public usefulness of the entire Tennessee River. Such use, if envisioned in its entirety, transcends mere power development; it enters the wide fields of flood control, soil erosion, afforestation, elimination from agricultural use of marginal lands, and distribution and diversification of industry. In short this power development of war days leads logically to national planning for a complete river water shed involving many States and the future lives and welfare of millions. It touches and give- [fol. 3229] life to all forms of human concerns.

I, therefore, suggest to the Congress legislation to create a Tennessee Valley Authority—a corporation clothed with the power of government but possessed of the flexibility and initiative of a private enterprise. It should be charged with the broadest duty of planning for the proper use, conservation and development of the natural resources of the Tennessee River drainage basin and its adjoining territory for the general social and economic welfare of the nation. This Authority should also be clothed with the necessary power to carry these plans into effect. Its duty should be the rehabilitation of the Muscle Shoals development and the co-ordination of it with the wider plan.

Many hard lessons have taught us the human waste that results from lack of planning. Here and there a few wise cities and counties have looked ahead and planned. But our nation has "just grown". It is time to extend planning to a wider field, in this instance comprehending in one great project many States directly concerned with the basin of one of our greatest rivers.

This in a true sense is a return to the spirit and vision of the pioneer. If we are successful here we can march on, step by step, in a like development of other great natural [fol. 3230] territorial units within our borders.

COMPLAINANTS' EXHIBIT No. 647 (Excluded)

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Message of President Roosevelt

June 8, 1934.

• • • The extent of the usefulness of our great natural inheritance of land and water depends on our mastery of it. We are now so organized that science and invention have given us the means of more extensive and effective attacks upon the problems of nature than ever before. We have learned to utilize water power, to reclaim deserts, to recreate forests and to redirect the flow of population. Until recently we have proceeded almost at random, making many mistakes.

• • • The rate of speed that we can usefully employ in this attack on impossible social and economic conditions must be determined by business-like procedure. It would be absurd to undertake too many projects at once or to do a patch of work here and another there without finishing the whole of an individual project. Obviously, the government cannot undertake national projects in every one of the 435 Congressional districts, nor even in every one of the 48 states. The magnificent conception of national realism and [fol. 3231] national needs that this Congress has built up has not only set an example of large vision for all time, but has almost consigned to oblivion our ancient habit of pork barrel legislation: to that we cannot and must not revert. When the next Congress convenes I hope to be able to present to it a carefully considered national plan, covering the development and the human use of our natural resources of land and water over a long period of years.

• • • This seeking for a greater measure of welfare and happiness does not indicate a change in values. It is rather a return to values lost in the course of our economic development and expansion.

Ample scope is left for the exercise of private initiative. In fact, in the process of recovery, I am greatly hoping that repeated promises that private investment and private initiative to relieve the government in the immediate future of much of the burden it has assumed will be fulfilled. We have not imposed undue restrictions upon business. We have not opposed the incentive of reasonable and legitimate private profit. We have sought rather to enable certain

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aspects of business to regain the confidence of the public. We have sought to put forward the rule of fair play in finance and industry.

[fol. 3232]

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President's Letter Creating The National Power Policy Committee

July 9, 1934.

I wish to establish in the Public Works Administration a Committee to be called the "National Power Policy Committee." Its duty will be to develop a plan for the closer cooperation of the several factors in our electrical power supply—both public and private—whereby national policy in power matters may be unified and electricity be made more broadly available at cheaper rates to industry, to domestic and, particularly, to agricultural consumers.

Several agencies of the government, such as the Federal Power and Trade Commissions, have in process surveys and reports useful in this connection. The Mississippi Valley Committee of Public Works, is making studies of the feasibility of power in connection with water storage, flood control and navigation projects. The War Department and Bureau of Reclamation have under construction great hydroelectric plants. Representative of these agencies have been asked to serve on the committee. It is not to be merely a fact-finding body, but rather one for the development and unification of national power policy.

[fol. 3233] As time goes on there undoubtedly will be legislation on the subject of holding companies and for the regulation of electric current in interstate commerce. This committee should consider what lines should be followed in shaping up this legislation. Since a number of the States have commissions having jurisdiction over intrastate power matters, it is necessary that whatever plan is developed should have regard to the powers of these various State Commissions as well as of the States in general.

It is not thought that it will be necessary to have frequent meetings of the full Committee. An adequate administrative staff will be provided and personal expenses of the members of the Committee in connection with its meetings will be met.

The Committee is to be advisory to the President.

[fol. 3209] **COMPLAINANTS' EXHIBIT No. 647 (Excluded)**

Power Views of Franklin D. Roosevelt

Compiled November, 1934, for National Power Policy Committee

[fol. 3210]

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Hon. Harold L. Ickes, Chairman, National Power Policy Committee.

SIR:

Submitted herewith is a compilation of extracts from public statements by Franklin D. Roosevelt, as President and as Governor of the State of New York, revealing his views with regard to electric power.

Here, too, are presented excerpts from Federal laws, and documents which disclose the policy of the United States in this regard.

Respectfully, (Signed) Joel David Wolfsohn, Executive Secretary.

Washington, D. C., November 23, 1934.

[fol. 3211] 18. Grand Coulee Dam Speech

13. Holding Company

9. Holding Company—Regulation

23. Ickes (Secretary) Statement of PWA Policy

4. Inaugural Address—F. D. R.—As Governor

25. Johnson Act

6. Judicial Protection for Utilities

16. Legislation Needed

4. Legislature—Duty of

17. Letter Creating Nat'l Power Policy Com.

12. "Looking Forward" by F. D. R.

5. Messages—Jan. 2, 1929

6. " March 12, 1929

7. " Jan. 1, 1930

15. " April 10, 1933

16. " June 8, 1934

6. " St. Lawrence River

15. " Tennessee Valley Authority

23. Municipal Power Plants—PWA Policy

22. National Industrial Recovery Act

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- 16. National Plan
- 17. National Power Policy Committee
- 4. New York State Water Power Policy

[fol. 3212]

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- 14. "On Our Way" by F. D. R.
- 5. Ownership of Water Power Sites
- 23. Policy of PWA on Municipal Plants
- 8. Portland Speech
- 18. Power in Home
- 12. Power Issue
- 4. Power Policy—New York
- 31. Power Policy—Reclamation
- 16. Private Initiative
- 4. Problem of Water Power
- 8. Protection of Public Interest
- 23. Public Works Administration Policy
- 31. Reclamation Power Policy
- 9. Regulation—Holding Companies
- 6. Regulation vs. Contract
- 18. Speeches—Grand Coulee Dam
- 4. " Inauguration as Governor
- 8. " Portland
- 19. " Tupelo
- 34. Senate Bill on Reclamation Power Policy
- 26. Tennessee Valley Authority Act
- 15. " " Message
- 28. " " Policy.

[fol. 3213] Inaugural Address of Franklin D. Roosevelt as
Governor of New York

January 1, 1929.

State Water Power Policy

I should like to state clearly the outstanding features of the problem itself. First, it is agreed, I think, that the water power of the State should belong to all the people. There was, perhaps, some excuse for careless legislative gift of power sites in the days when it was of no seemingly great importance. There can be no such excuse now. The title to this power must vest forever in the people of this

COMPLAINANTS' EXHIBIT No. 647 (Excluded)

State. No commission, no, not the Legislature itself has any right to give, for any consideration whatever, a single potential kilowatt in virtual perpetuity to any person or corporation whatsoever. The Legislature in this matter is but the trustee of the people, and it is their solemn duty to administer such heritage so as most greatly to benefit the whole people. On this point there can be no dispute.

[fol. 3214] It is also the duty of our legislative bodies to see that this power, which belongs to all the people, is transformed into useable electrical energy and distributed to them at the lowest possible cost. It is our power; and no inordinate profits must be allowed to those who act as the people's agents in bringing this power to their homes and work shops. If we keep these two fundamental facts before us, half of the problem disappears.

I, as your Governor, will insist, and I trust with the support of the whole people, that there be no alienation of our possession of and title to our power sites, and that whatever method of distribution be adopted there can be no possible legal thwarting of the protection of the people themselves from excessive profits on the part of anybody.

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Message to the Legislature by Governor Roosevelt

January 2, 1929.

* * * On the subject of the development of water power sites, owned in part or in whole by the people of the State, I am convinced of two facts: First, that there is a definite demand for the undertaking of their development—[fol. 3215] not several years hence but this year; second, that the title and constant control of the power generated at the sources shall remain definitely in the people and shall not be alienated by long term leases. This is one of those questions on which I hope we can reach an agreement * * *

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Special Message of Governor Roosevelt on St. Lawrence
Power Development

March 12, 1929.

In the matter of the actual development of the St. Lawrence power, it is not enough that the ultimate title vest in the State. I hope there will be no difficulty in securing agreement that not only title *buy* physical possession of the development should at all times vest in direct representatives of the people.

At least of equal importance is the problem of transmission and distribution to the ultimate consumer. A mere development of power at a low production cost is insufficient unless, at the same time we make certain that it is finally distributed to the ultimate consumer at a fair price, under which no individual or corporation, involved in the business of transmitting or distributing, will make more than a [fol. 3216] reasonable profit.

First arises the question of who should do the transmitting and distributing of the power actually generated by representatives of the people of the State. I follow, I think, the opinion of my distinguished predecessor in saying that because of the complications involved, the actual operation of a transmission or a distribution system in this field of activity should, if possible with safety to the people, be undertaken by private enterprise, and that the State should undertake it only if private enterprise proves that it cannot, or will not, successfully carry out the task. . . .

(Referring to the extent to which the Federal Courts had nullified the protection to the consumer originally embodied in public utility regulation, he said:)

That is why in trying to treat this whole problem of development, transmission and distribution of the St. Lawrence power as a complete picture in the interests of the people of the State, I have sought a method by which we could avoid the rate regulating powers of the Public Service Commission, tied up as it is at the present time by Federal Court rulings. I have, therefore, after consultation with many experts on the subject, come to the conclusion that the

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representatives or trustees who develop the power can enter [fol. 3217] into contract with transmitting and distributing companies, under which contracts a fair price to the consumer will be guaranteed, this price to make allowances only for a fair return to the companies on the actual capital invested in the transmitting and distributing of this particular power energy. It is a matter frankly based on theory of contract rather than the theory of regulation.

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Annual Message by Governor Roosevelt

January 1, 1930.

At the same time I thought it advisable that the State agency should at least provide the financing of, and retain the fee to, any system of statewide transmission of electricity made necessary by the new power development. As a mere matter of saving in interest rates alone this would reduce the cost of electricity many millions of dollars each year, for the consumer, of course, pays the interest and dividend charges on the project.

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[fol. 3218] Speech of Governor Roosevelt at Portland,
Oregon

September 21, 1932.

Protection of the Public Interest

* * * I have strengthened the belief that I have had for a long time, and that I have constantly set forth in my speeches and papers in my work as Governor of the State of New York, that the question of power, of electrical development and distribution is primarily a national problem.

* * * As I see it, the object of government is the welfare of the people. The liberty of people to carry on their business should not be abridged unless the larger interest of the many are concerned. The interests of the few must yield. It is the purpose of government to see not only that the legitimate interest of the few are protected but that the welfare and rights of the many are conserved. These

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are the principles which we must remember in any consideration of this question. This I take it, is sound government—not politics. Those are the essential basic conditions under which government can be of service.

• • • When the great possessions that belong to all of us—that belong to the nation—are at stake, we are not partisans, we are Americans.

[fol. 3219] • • • A false public policy has been spread throughout the land, through the use of every means, from the innocent school teacher down to a certainly less innocent former chairman of the Republican National Committee itself.

• • • Let me make it clear that I have no objection to the method of control through a public service commission. It is in fact, a proper way for the people themselves to protect their interests.

In practice, however, it has in many instances departed from its proper sphere of action and, I may add, from its theory of responsibility.

It is an undoubted and undeniable fact that, in our modern American practice, the public service commissions of many States have often failed to live up to the high purpose for which they were created.

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Protection of the Public Interest

Sept. 21, 1932.

In many instances their selection has been obtained by the public utility corporations themselves. These corporations have often influenced, to the prejudice of the public, the actions of public service commissions.

• • • The regulating commission, my friends, must be a tribune of the people, putting its engineering, accounting, legal resources into the breach for the purpose of getting the facts and doing justice to both the consumers and investors [fol. 3220] in public utilities.

This means positive and active protection of the people against private greed.

• • • But • • • cold figures do not measure the human importance of electric power in our present social

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order, Electricity is no longer a luxury—it is a definite necessity. It lights our homes, our places of work and our streets.

* * * The reason that we cannot take advantage of our own possibilities is frankly and definitely because many selfish interests in control of light and power industries have not been sufficiently far-sighted to establish rates low enough to encourage widespread public use. The price you pay for your utility service is a determining factor in your use of it.

* * * True regulation is for the equal benefit of the consumer and the investor, and the only man who will suffer from true regulation is the speculator or the unscrupulous promoter who levies tribute equally from the man who buys the service and from the man who invests his savings in this great industry,

I seek to protect both the consumer and the investor, To that end I propose and advocate now, as I have proposed and advocated heretofore, the following remedies, on the part of the government for the regulation and control of public utilities engaged in the power business and companies [fol. 3221] and corporations relating thereto:

1. Full publicity as to all capital issues of stock, bonds and other securities, liabilities and indebtedness, and capital investment, and frequent information as to gross and net earnings.

2. Publicity on stock ownership of stocks and bonds and other securities, including the stock and other interest of all officers and directors.

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Protection of the Public Interest

Sept. 21, 1932.

3. Publicity with respect to all inter-company contracts, and services and interchange of power.

4. Regulation and control of holding companies by Federal Power commission and same publicity with regard to such holding companies as provided for the operating companies.

5. Cooperation of the Federal power commission with public utilities commissions of the several States, obtaining

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information and data pertaining to the regulation and control of such public utilities.

6. Regulation and control of the issue of stocks and bonds and other securities on the principal of prudent investment only.

7. Abolishing by law the reproduction cost theory for rate making and establishing in place of it the actual money, [fol. 3222] prudent-investment principle as the basis for rate making.

8. Legislation making it a crime to publish or circulate false or deceptive matter relating to public utilities.

* * * I do not hold with those who advocate government ownership or government operation of all utilities. I state to you categorically that as a broad general rule the development of utilities should remain, with certain exceptions, a function for private initiative and private capital.

* * * I therefore lay down the following principle: That where a community, a city or county or a district is not satisfied with the service rendered or the rates charged by the private utility, it has the undeniable right as one of its functions of government, one of its functions of home rule, to set up, after a fair referendum has been taken, its own governmentally-owned and operated service.

That right has been recognized in most of the States of the union. Its general recognition by every State will hasten the day of better service and lower rates.

* * * State-owned or Federal-owned power sites can and should properly be developed by government itself. When so developed, private capital should be given the first opportunity to transmit and distribute the power on the [fol. 3223] basis of the best service and the lowest rates to give a reasonable profit only.

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Protection of the Public Interest

Sept. 21, 1932.

The right of the Federal Government and State Governments to go further and to transmit and distribute where reasonable and good service is refused by private capital

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P. W. 22982

Speech of President Roosevelt at Grand Coulee, Washington

August 5, 1934.

Sees Power in Every Home

* * * It is going to affect not only the Columbia River Basin, but it is going to affect all mountain States and the Pacific Coast territory, and we are going to see, I believe, [fol. 3234] with our own eyes, electricity and power made so cheap that they will become a standard article of use not only for agriculture and manufacturing, but also for every home within reach of an electric light line.

The experience of those sections of the world that have cheap power proves very conclusively that the cheaper the power the more of it is used—the more of it is used in home and small businesses; and that makes me believe that this low dam which we are undertaking at the present time is going to justify its existence before it is completed by our being able to contact for the sale of practically all of the power it will develop. * * *

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Speech of President Roosevelt at Tupelo, Mississippi

November 18, 1934.

I would not make a speech to you today because we are assembled on this glorious Sunday morning more as neighbors than as anything else.

I have had a very wonderful three days and everywhere that I have gone the good people have come as neighbors to talk with me, and they have not come by the thousands they have come literally by the acres.

[fol. 3235] This is the first time in my life that I have had the privilege of seeing this section of the State of Mississippi. Many, many years ago, when Pat Harrison and I were almost boys, I got acquainted with his stamping ground down on the gulf. Today I am especially glad to come into the northern part of the State.

Two years ago, in 1932, during the campaign, and again in January, 1933, I came through Kentucky—through the

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Tennessee Valley—and what I saw on those trips—what I saw of human beings, made the tears come to my eyes. The great outstanding thing to me for these past three days has been the change in the looks of people's faces.

It has not been only a physical thing. It has not been the contrast between what was actually a scarcity of raiment two years ago or a lack of food two years ago—the contrast between that and better clothing and more food today—but it is something in people's faces, and I think you understand what I mean. There wasn't much hope in those days. People were wondering what was going to come to this country. And yet today I see not only hope, but I see determination—knowledge that all is well with the country and that we are coming back.

I suppose that you good people know a great deal more of the efforts that we have been making in regard to the work of the Tennessee Valley Authority than I do, because you [fol. 3236] have seen its application in your counties and your own towns and your own homes, and, therefore, it will be like carrying coals to Newcastle for me to tell you about what has been done.

But perhaps in referring to it I can use you as a text—a text that may be useful to many other parts of the

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F. D. R. Speech at Tupelo

Nov. 18, 1934.

Nation, because people's eyes are upon you and because what you are doing here is going to be copied in every State in the Union before we get through.

We recognize that there will be a certain amount of—what shall I say?—rugged opposition to this development, but I think we recognize also that the opposition is fading as the weeks and months go by, fading in the light of practical experience.

I cite certain figures for the benefit of the gentlemen of the press, who have come hither from many climes. I am told that from March of this year, when you started using TVA power, the consumption of power for residential purposes has risen from 41,000 kilowatts to 89,000 kilowatts, an increase of 126 per cent. I understand that from the finan-

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cial point of view, in spite of various fairy tales that have been spread in other parts of the country, your power sys- [fol. 3237] tem is still paying taxes to the municipality. That is worth remembering. Furthermore, that, as a whole, it is a remarkable business success.

I talk about those figures first because it has been so often wrongly alleged that this yardstick which we are using could not be applied to private business and because a Government yardstick receives so many favors, that it is left off from paying this and paying that and paying the other thing. Well, we are proving it in this Tennessee Valley that by using good business methods we can instruct a good many business men in the country.

And there is another side of it. I have forgotten the exact figures and I can't find them in the voluminous report at this moment, but the number of new refrigerators that have been put in—that means something besides just plain dollars and cents. That means a greater human happiness.

Electric cookstoves and all the other dozens of things which, when I was in the Navy—we used to call gadgets—are making it possible. All of us working together, to improve human life through the introduction of things that aren't especially new so far as invention is concerned, but things which are becoming more and more necessities in our American life in every part of the country.

[fol. 3238] And I have been interested this morning in seeing these new homesteads—not just the buildings, not just the

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F. D. R. Speech at Tupelo

Nov. 18, 1934.

land that they are on, not just the excellent landscaping of the trees among which those homes have been set, but especially the opportunities that those homes are giving to families to improve the standard of living.

And finally, my friends, there is one thing about all that you are doing here in Tupelo, that they are doing in Corinth, that they are doing in Athens, and Norris and the various other places where accomplishment can be seen today—aye, the most important thing of all, I think, is that it is

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being done by the communities themselves. This is not coming from Washington. It is coming from you. You are not being Federalized. We still believe in the community, and things are going to advance in this country exactly in proportion to the community effort. This is not regimentation—it is community rugged individualism. It means no longer the kind of rugged individualism that allows an individual to do this, that or the other thing that will hurt his neighbors. He is forbidden to do that from now on—and it is a mighty good thing. But he is going to be encouraged in every known way from the National Capitol and the State capital and the county seat to use that individualism in cooperating with his neighbor's individualism so that he and his neighbors may improve their lot in life.

Yes, I have been thrilled by these three days—thrilled in the knowledge not only of practical accomplishment, but thrilled also in the belief—the deep-seated belief on my part—that the people of this Nation understand what we are trying to do, are cooperating with what we are trying to do and have made up their minds that we are going to do it.

And so, in saying “good bye” to you for a short time—because I am coming back—I ask all of you, throughout the length and breadth of the Tennessee Valley and those areas which form an economic portion of that valley—I ask you all to remember that the responsibility for success lies very largely with you—confident that you are going to give to the Nation an example which will be a benefit not only to yourselves, but to the whole 130,000,000 Americans in every part of the land.

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National Industrial Recovery Act

Public No. 67

1933

Sec. 202. The Administrator, under the direction of the President, shall prepare a comprehensive program of public works, which shall include among other things the following: • • • (b) conservation and development

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of natural resources, including control, utilization and purification of waters, prevention of soil or coastal erosion, development of water power, transmission of electrical energy. . . .

P. W. A. 22982

Press Release of PWA

September 27, 1934.

Achievement in certain instances of the administration purpose of making electric energy more widely available at cheaper rates today lead to a clarification of the policy on power by the Public Works Administration.

Municipal or local publicly owner power projects will be aided by PWA only when, in addition to meeting those qualifications necessary for public works projects, they assure electricity to communities at rates substantially lower than otherwise obtainable under the unchanged basic policy enunciated by Public Works Administrator Ickes.

The statement of Administrator Ickes followed action by some privately owned utilities, which, on reexamination of their condition, found it possible to reduce rates to a point below those proposed by municipal project plants.

[fol. 3241] In all allotments made for municipal power plants by the Public Works Administration proposed rates have been well below existing private company rates. Consequently the fact that the companies in some instances have met these proposed municipal rates has been deemed as showing progress toward one of the aims of this phase of the public works program.

In the cases affected Public Works Administration policy will be so administered that municipal plant construction will not be deprived of the possibility of public works support until such time as the local Government feels assured the proposed rate reduction by the existing utility will be in effect on a reasonably permanent basis.

Since the public works program began financing electric plants, where they are socially desirable and where they will be self-liquidating, there have been reductions of rates by private utilities in different localities. The private utilities are becoming increasingly cognizant of the greater use of power resulting from lower rates.

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Administrator Ickes said:

"PWA has endeavored to make electric energy more broadly available at cheaper rates by acting on applications of municipalities for loans and grants to finance municipal [fol. 3242] systems where reasonable security is offered and the project is socially desirable. They are deemed desirable where the loan can be amortized in a reasonable period while charging rates substantially lower than those of the existing utility.

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Press Release of PWA

September 27, 1934.

"However, we make it a practice before approving the loan to give the company an opportunity to put in effect rates at least as low as those at which the municipal system will be self-liquidating. Several utility companies have accepted this opportunity. It is obvious that in such cases it is advantageous to the city and to PWA that the offer be accepted and the applications withdrawn. To make loans and grants to finance projects where the competitor offers rates which are lower than those possible by the city plant, would duplicate facilities without any social betterment and impose on the city a burden which it probably could not meet without resort to taxation.

"Furthermore, in the described situation Public Works will be free to use its funds to better advantage elsewhere. The action of the utility companies referred to supports the [fol. 3243] belief that domestic rates, in certain instances at least, are so high as to be disadvantageous to the company as well as unjust to the consumers. Experience shows that lower rates may produce larger profits particularly where promotional campaigns are conducted and the cost of electrical appliances is made reasonable.

"PWA will cooperate with cities to prevent rates rising on an indication municipal plants may not be built. PWA will not rescind allotments or suggest the withdrawal of applications until the lowered rates are legally in effect.

"State laws authorize municipal competition, hence it is PWA's position that the State has determined that such

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competition may be socially desirable. We believe it is for the municipal applicant to determine whether or not it desires to compete with privately owned utilities. It is our policy to consider such applications particularly where franchises are soon to expire, provided the project is self-liquidating at rates lower than those which the existing utility is willing to put into effect."

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(Public No. 222—73d Congress)

May 14, 1934.

[fol. 3244]

Johnson Act

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the first paragraph of section 24 of the Judicial Code, as amended, is amended by adding at the end thereof the following: "Notwithstanding the foregoing provisions of this paragraph, no district court shall have jurisdiction of any suit to enjoin, suspend, or restrain the enforcement, operation, or execution of any order of an administrative board or commission of a State, or any rate-making body of any political subdivision thereof, or to enjoin, suspend, or restrain any action in compliance with any such order, where jurisdiction is based solely upon the ground of diversity of citizenship, or the repugnance of such order to the Constitution of the United States, where such order (1) affects rates chargeable by a public utility, (2) does not interfere with interstate commerce, and (3) has been made after reasonable notice and hearing, and where a plain speedy, and efficient remedy may be had at law or in equity in the courts of such State."

Sec. 2. The provisions of this Act shall not affect suits commenced in the district courts, either originally or by removal, prior to its passage; and all such suits shall be continued, proceedings therein had, appeals therein taken, [fol. 3245] and judgment therein rendered, in the same manner and with the same effect as if this Act had not been passed.

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Public No. 17

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Tennessee Valley Authority

(1) To produce, distribute, and sell electric power, as herein particularly specified . . .

Sec. 10. The board is hereby empowered and authorized to sell the surplus power not used in its operations, and for operation of locks and other works generated by it, to States, counties, municipalities, corporation-, partnerships, or individuals, according to the policies hereinafter set forth; and to carry out said authority, the board is authorized to enter into contracts for such sale for a term not exceeding twenty years, and in the sale of such current by the board it shall give preference to States, counties, municipalities, and cooperative organizations of citizens or farmers, not organized or doing business for profit, but primarily for the purpose of supplying electricity to its own citizens [fol. 3246] or members: Provided, That all contracts made with private companies or individuals for the sale of power, which power is to be resold for a profit, shall contain a provision authorizing the board to cancel said contract upon five years' notice in writing, if the board needs said power to supply the demands of States, counties, or municipalities. In order to promote and encourage the fullest possible use of electric light and power on farms within reasonable distance of any of its transmission lines the board in its discretion shall have power to construct transmission lines to farms and small villages that are not otherwise supplied with electricity at reasonable rates, and to make such rules and regulations governing such sale and distribution of such electric power as in its judgment may be just and equitable; Provided further, That the board is hereby authorized and directed to make studies, experiments, and determinations to promote the wider and better use of electric power for agricultural and domestic use, or for small or local industries, and it may cooperate with State governments, or their subdivisions or agencies, with educational

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or research institutions, and with cooperatives or other organizations, in the application of electric power to the fuller and better balanced development of the resources of the region.

Sec. 11. It is hereby declared to be the policy of the Gov-
[fol. 3247] ernment so far as practical to distribute and sell the surplus power generated at Muscle Shoals equitably among the States, counties, and municipalities within transmission distance. This policy is further declared to be that the projects herein provided for shall be considered primarily as for the benefit of the people of the section as a whole and particularly the domestic and rural consumers to whom the power can economically be made available, and accordingly that sale to and use by industry shall be a secondary purpose,

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to be utilized principally to secure a sufficiently high load factor and revenue returns which will permit domestic and rural use at the lowest possible rates and in such manner as to encourage increased domestic and rural use of electricity. . . .

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The Power Policy of the Tennessee Valley Authority

August 25, 1933.

1. The business of generating and distributing electric power is a public business.

[fol. 3248] 2. Private and public interests in the business of power are of different kind and quality and should not be confused.

3. The interest of the public in the widest possible use of power is superior to any private interest. Where the private interest and this public interest conflict, the public interest must prevail.

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4. Where there is a conflict between public interest and private interest in power which can be reconciled without injury to the public interest, such reconciliation should be made.

5. The right of a community to own and operate its own electric plant is undeniable. This is one of the measures which the people may properly take to protect themselves against unreasonable rates. Such a course of action may take the form of acquiring the existing plant, or setting up a competing plant, as circumstances may dictate.

6. The fact that action by the Authority may have an adverse economic effect upon a privately-owned utility, should be a matter for the serious consideration of the Board in framing and executing its power program. But it is not the determining factor. The most important considerations are the furthering of the public interest in making power available at the lowest rate consistent with sound [fol. 3249] financial policy, and the accomplishment of the social objectives which low cost power makes possible. The Authority cannot decline to take action solely upon the ground that to do so would injure a privately-owned utility.

7. To provide a workable and economic basis of operations, the Authority plans initially to serve certain definite regions and to develop its program in those areas before going outside.

8. The initial areas selected by the Authority may be roughly described as:

(a) The region immediately proximate to the route of the transmission line soon to be constructed by the Au-

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The Power Policy for the Tenn. Valley Authority

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thority between Muscle Shoals and the side of Norris Dam.

(b) The region is proximity to Muscle Shoals, including northern Alabama and north-eastern Mississippi.

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(c) The region in the proximity of Norris Dam (the new source of power to be constructed by the Authority on the Clinch River in Northeast Tennessee).

[fol. 3550] At a later stage in the development it is contemplated to include, roughly, the drainage area of the Tennessee River in Kentucky, Alabama, Georgia and North Carolina, and that part of Tennessee which lies east of the west margin of the Tennessee drainage area.

To make the area a workable one and a fair measure of public ownership, it should include several cities of substantial size, (such as Chattanooga and Knoxville), and ultimately, at least one city of more than a quarter million, with transmission distance, such as Birmingham, Memphis, Atlanta, or Louisville.

While it is the Authority's present intention to develop its power program in the above-described territory before considering going outside, the Authority may go outside the area if there are substantial changes in general conditions, facts, or governmental policy, which would necessarily require a change in this policy of regional development, or if the privately-owned utilities in the area do not cooperate in the working out of the program.

Nothing in the procedure here adopted is to be construed in any sense a commitment against extending the Authority's power operations outside the area selected, if the above conditions or the public interest required. Where special considerations exist, justifying the Authority going outside this initial area, the Authority will receive and consider applications based on such special considerations. Among such special considerations would be unreasonably high rates for service, and a failure or absence of public regulation to protect the public interest.

9. Every effort will be made by the Authority to avoid the construction of duplicate physical facilities, or wasteful competitive practices. Accordingly, where existing lines of privately-owned utilities are required to accomplish the Authority's objectives, as outlined above, a genuine

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effort will be made to purchase such facilities from the private utilities on an equitable basis.

10. Accounting should show detail of costs, and permit of comparison of operations with privately-owned plants, to supply a "yardstick" and an incentive to both private and public managers.

11. The accounts and records of the Authority as they pertain to power, will always be open to inspection by the public.

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[fol. 3252] Annual Report of the Commission of Reclamation for 1932

Power Policy

• • • What should be the policy of the Government with relation to the income from these commercial plants built as adjuncts to irrigation development? The position of the bureau is that the profits from these power plants should be applied—

1. To the repayment of the construction cost of the power system.

2. To aid in repayment of the construction cost of the dam or other structure which creates or makes possible the power development.

3. To be covered into the reclamation fund to be used as other moneys in this fund in the construction of additional works.

The reason for this policy is that in every case these works have been wholly built at the cost of the Government. Irrigators under these projects have advanced no part of the money for their construction, and in some part of the recent works have not obligated themselves to pay any part of the

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construction. Where they have obligated themselves such payments have not been required because the income from [fol. 3253] the power plant has more than met the repayments on its cost required by the Government. If the income from these power works is to be given to the water users under the projects, it will be made as a gift. The revenue will furnish a perpetual income for which no investment was made and which benefit is not shared by the irrigators on projects where power development is not possible.

The position of the bureau is that these commercial power plants should be the perpetual property of the Federal Government; that after they have been paid for out of power revenues the water users have no further claim on the power plants or their revenues. Because of the fact that the small plants built for construction purposes were turned over to the water users those dwelling under the larger commercial plants insist that they shall also be turned over to them and that they have the revenues to put in their pockets as a perpetual dividend on the investment not made by them but by the Government.

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Power Policy

There is need for a definite policy applicable alike to all future Federal reclamation projects, involving power developments, to control the construction of power plants and related features where needed either to provide cheap power [fol. 3254] for use in construction, for irrigation and drainage purposes, or to produce and dispose of surplus power for commercial and industrial uses, as a means of providing revenues to repay the cost of the power development as well as part of the cost of the irrigation development, thereby relieving the water users of some of the financial burden which otherwise they would have to bear. The policy should also provide for disposition of the power revenues.

The Bureau of Reclamation has taken the position that the power plants which are built with Government funds or which utilize power opportunities created by such expenditures should be the perpetual property of the Federal Government and that the profits resulting therefrom should be used to further the work of reclamation.

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Some of the more recent appropriation acts for certain projects established a new plan for the disposition of power revenues under which they are applied, first, to the cost of operation and maintenance of the power system, and, second, to the repayment of the cost of the power system and other related works, and after these costs have been repaid then the new power revenues are to go into the reclamation fund. This plan has several advantages over the original plan. It relieves the water users of the obligation to repay [fol. 3255] part of the project costs which are to be repaid out of power receipts. Eventually after the costs of the power systems have been repaid the reclamation fund will receive substantial revenues from power which will enable reclamation work to proceed at a faster rate than would otherwise be possible. Water users on projects having power income and on projects having no power income would be placed on a more nearly equal basis.

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Commission**

1933

The Federal Water Power Act represents a declared policy of the Congress to provide for the improvement of navigation and the development of water power through the instrumentality of private and governmental agencies, which, by the act, may be licensed to use, upon prescribed conditions, the water power of streams subject to Federal jurisdiction or to use public lands. These conditions to the granting of such valuable privileges are intended to promote the fundamental conservation purposes of the act through improvement of navigation and development of [fol. 3256] water power, and at the same time to safeguard the public interest by protecting the consumers of the generated power against exorbitant charges.

* * * Pursuant to an Executive order of the President (Executive Order No. 6251, Aug. 19, 1933, under title 11 of the National Industrial Recovery Act), the Commission has undertaken a survey of the water resources of the Nation as they relate to the conservation, development, control, and

COMPLAINANTS' EXHIBIT No. 647 (Excluded)

utilization of water power and of the relation of water power to other industries and to interstate and foreign commerce. The allocation of necessary funds available under the public works section of the National Industrial Recovery Act for this purpose permits the Commission to make an investigation prescribed by section 4(a) of the Federal Water Power Act, which heretofore has not been possible for lack of necessary funds.

On the basis of this survey the Commission is directed to assist the Federal Emergency Administrator of Public Works in formulating a comprehensive program — public works pertaining to the development of water power and the transmission of electrical energy. Under authority of this Executive order, the Commission has also instituted an investigation of the cost of the transmission of electrical energy in the United States and its distribution to consumers, this being in harmony with the purpose of Senate Resolution 80, introduced by Senator Costigan. A still further duty imposed by this Executive order upon the Commission is that of investigating and reporting upon applications for loans referred to it by the Federal Emergency Administrator of Public Works for construction of public-works projects involving the development and utilization of electric power. In order to assist in expediting the national recovery program, the Commission has given immediate consideration to such applications in reporting on the engineering and economic aspects of the proposed projects.

P. W. 22982

S. 3375, 73d (2d Session) Passed by the Senate Only

June 6, 1934.

AN ACT To provide for the distribution of power revenues on Federal reclamation projects, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That any power system hereafter built on Federal reclamation projects heretofore or hereafter constructed by the United States under the provisions of the Act of June 17, 1902 (32 Stat. 388), and Acts amendatory thereof and supplementary thereto, shall be operated by the United

COMPLAINANTS' EXHIBIT No. 647 (Excluded)

States as a separate and distinct system, independently of the irrigation system. The construction cost of such power system, including such portion as the Secretary of the Interior may find (his finding to be conclusive) to be proper and equitable of the cost of structures and other facilities provided and used primarily for irrigation purposes but incidentally used in connection with and as a part of said power system, shall be returnable from power revenues and shall not be charged to or repaid, in whole or in part, by the water users of the project. Power furnished from such power system for construction of project features, for operation of project pumping plants, and for any and all project purposes shall be considered a sale and purchase and shall be charged for at such rate as determined by the Secretary of the Interior. Such charge for power furnished for project purposes during the period of construction and operation of the irrigation system by the United States and any rentals or sale of power to water users and their organizations after they have taken over the operation and [fol. 3259] maintenance of the irrigation system shall not be construed as vesting in them any interest in the power system. All revenues realized from the operation of any such power system shall be covered into the reclamation fund and shall not be credited in payment of any obligations payable by the water users of the project or any division thereof.

Sec. 2. That as to reclamation projects now constructed or partially constructed having a power development in operation the cost of which has been charged to the water users who have obligated themselves to repay the same, the water users of the project, or any division thereof, who have assumed such obligation, may, at their option, be placed upon the same basis and become subject to the same conditions as those outlined in section 1 hereof, upon the execution of appropriate contract or contracts therefor satisfactory to the Secretary of the Interior.

P. W. 22982

S. 3375, 73d (2d Session)

Sec. 3. That wherever any power system now in operation, constructed under the provisions of the reclamation

COMPLAINANTS' EXHIBIT No. 647 (Excluded)

law by and at the expense of the United States, shall be enlarged or new construction work done thereon in the way of betterments or otherwise, such additional construction work shall be upon the same basis and subject to the same conditions as those provided for in section 1 hereof.

[fol. 3260] COMPLAINANTS' EXHIBIT No. 648 (Excluded)

Electric Home and Farm Authority, Inc., Activities Review

Chattanooga, Tennessee, May 20, 1935.

The Electric Home and Farm Authority, a federal agency, was incorporated on January 17, 1934. Its purpose was to increase electricity's usefulness to homes by reducing the costs of electrical services.

Activities and results up to this date may be summarized as follows:

A new plan for financing retail sales of approved electrical appliances, at lowered prices and lowered financing costs has been made available to approximately 375,000 home users of electricity in parts of Tennessee, Alabama, Georgia and Mississippi, and to many more within potential reach of electrical service in that area.

Eleven manufacturers of electric refrigerators, thirteen manufacturers of electric ranges, thirteen manufacturers of electric water heaters and fifteen manufacturers of electric water pumps have joined the Authority's program for marketing low-cost, standard quality appliances at prices and finance costs which made their use economical for families of average means.

[fol. 3261] Eight manufacturers of refrigerators introduced new models designed expressly for the EHFA program and sold at prices which made electric refrigeration a practical possibility for homes which could not afford it before.

The program's effects became national with the announcement that these manufacturers planned to sell the new models throughout the country at the prices effective in the EHFA's immediate territory.

Approximately 300 independent retail dealers, and the retail departments of five power companies, are participat-

COMPLAINANTS' EXHIBIT No. 648 (Excluded)

ing in the selling of EHFA approved and financed appliances.

A comprehensive educational program has been undertaken. It is intended to help home makers obtain the greatest possible benefits from electricity at the least possible cost.

Sales figures collected by private agencies not connected with EHFA indicated that amid a nation-wide upswing in appliance sales, the sales increases in the area affected immediately by EHFA and TVA exceeded the increases recorded in other sections.

An account of EHFA requires some statement of its official personnel and financial structure, of the conditions which brought it into being, and of the means it is using to develop its program.

The directors of EHFA are Dr. A. E. Morgan, David E. [fol. 3262] Lilienthal, and Dr. H. A. Morgan. Mr. Lilienthal is president of EHFA. Other principal officers are F. J. Carr, treasurer, and George D. Munger, commercial manager.

On April 5, 1935, Electric Home and Farm Authority extended its financing facilities to include the complete line of appliances rather than approved models only. This means that if there is an approved model in the line, EHFA will finance the other models at the standard EHFA financing terms that have heretofore been applicable to approved models only.

As an example to demonstrate the meaning of the new policy, assume Blank Company has received an EHFA approval on its small model refrigerator, which up to this time is the only model that could be financed through EHFA. Under the new policy of financing the complete line, EHFA will finance the other models of domestic refrigerators that are manufactured by Blank Company. This same policy of course applies to electric ranges, water heaters, and deep and shallow well pumps.

EHFA operated with a capital of one million dollars allocated from funds of the National Industrial Recovery Act, and a credit of ten million dollars from the Reconstruction Finance Corporation. This credit provides capital for EHFA's retail sales financing.

COMPLAINANTS' EXHIBIT No. 648 (Excluded)

EHFA came into being primarily because the high cost of electric power and the high cost of household appliances have been a double barrier to the full use of electricity in homes and on farms. EHFA set out to remove this barrier [fol. 3263] by encouraging the reduction of rates and prices.

EHFA works with and through existing manufacturers, retailers and electric power distributors. EHFA makes no appliances, it does no selling, it is not in the power business.

It cooperates with many agencies, private and public, engaged in these activities.

EHFA's financing plan affects the manufacturer, the seller, and the user of electrical appliances.

The plan provides that the buyer of an electric refrigerator, range, water heater, or electric pump sold by an authorized dealer in an authorized locality may pay for the equipment in three years if one appliance is bought, or in four years if two or more appliances are bought. The interest charges, and a small additional charge for bookkeeping and collection costs, are substantially lower than any previously available to buyers of electrical household equipment. These low charges and long terms, in conjunction with the low retail prices required for EHFA approval of an appliance, have materially reduced the costs of electrical appliances in the areas served by TVA and EHFA.

In the EHFA financing areas, the appliances are purchased on low monthly payments, collected by the local utility and billed with the user's monthly light bill. The utility forwards the payments to EHFA. The retailer receives his money immediately after the purchase is completed, EHFA buying his paper after the usual manner of commercial financing practice.

EHFA requires that its financing plan may be used only where rates are low enough to justify the full use of electricity by families of moderate income.

At this time it is available in the following territories: The part of Georgia served by the Georgia Power Company and the part of Tennessee served by the Tennessee Electric Power Company. The territory also includes the following independent utilities: Alcoa, Etowah, Lebanon, Cookeville, Dayton, Pulaski, and Franklin in Tennessee; Barnesville and Cartersville in Georgia; Athens in Alabama; Alcorn County, Amory, Tupelo, and New Albany in Mississippi,

COMPLAINANTS' EXHIBIT No. 648 (Excluded)

and the following counties in northeast Mississippi which are served directly by TVA power: Benton, Tippah, Tishomingo, Prentiss, Pontotoc, Lee, Itawamba, Union, and the northern half of Monroe. Also rural lines in western half of Lauderdale County, Alabama, and rural lines in eastern half of Colbert County, Alabama.

The electrical appliance industry has been linked to the EHFA program from the start. The first move of EHFA was a series of conferences with a special committee of the National Electric Manufacturers Association, and manufacturers have been in close cooperation since. One result was Mr. Lilienthal's announcement of July 28, 1934, that "through action on the part of the manufacturers," low-[fol. 3265] cost refrigerators approved for EHFA financing would be sold nationally at prices effective in EHFA territory.

This announcement was in line with Mr. Lilienthal's repeated statement that "the EHFA program is a consumer program."

The appearance of the EHFA emblem on an appliance means that the appliance was manufactured to quality standards, that it was priced reasonably and that its retail sale can be financed by EHFA in authorized localities.

A comprehensive domestic electric service program is under way, directed by Miss Eloise Davison, director of domestic electric service. One of her first activities was assistance to the University of Tennessee in setting up a modern electric home laboratory, equipped with a full assortment of household appliances consigned by manufacturers, and the offering of courses in home electrification as part of the home economics curriculum.

Cooperation is being given other universities and colleges in providing up-to-date instruction in the home uses of electricity.

Electric Home and Farm Authority maintains central offices at Chattanooga, Tennessee, using for this purpose the Old Post office and Federal Building.

Contract No. TVHU-8A

EHFA 2A.

To Tennessee Valley Authority, Knoxville, Tennessee.

GENTLEMEN :

Under a contract made effective as of the 1st day of July 1934 you agreed with the Electric Home and Farm Authority, Inc., in its individual corporate capacity, hereinafter called "Authority", and with the Electric Home and Farm Authority, Inc., in its capacity as Trustee under a trust deed executed in May, 1934, hereinafter called "Trustee," to receive as the agent of the Authority and/or Trustee, as those terms were defined in the aforesaid agreement, "customer paper" received by retailers through the sale of "approved appliances."

It is now the wish of certain of the retailers operating under the Electric Home and Farm Authority plan that the Authority and/or Trustee directly, or operating through its agents, undertake to purchase deferred payment paper received by said retailers through the sale of electrical appliances other than "approved appliances." Authority and Trustee have indicated to said retailers a willingness [fol. 3267] to purchase such deferred payment paper on the condition that said paper shall be subject to all the terms, conditions, obligations, and warranties which attach to the form, offer, sale, recording payment, assignment, or repurchase of "customer paper," as that term is defined in the Retailers Application and Repurchase Agreement and in the above mentioned contract with you.

To carry out this extended financing plan the Electric Home and Farm Authority, Inc. wishes to extend the agency powers granted to you under the above mentioned contract of July 1, 1934 in such manner that your company will undertake to receive as agent for Authority and/or Trustee, deferred payment paper received by the retailers through the sale of an appliance other than an "approved appliance" in the same manner as you now receive "customer paper" from said retailers.

To perform this service the Authority offers to pay you the same consideration for each item of deferred payment paper purchased hereunder for the account of the Author-

COMPLAINANTS' EXHIBIT No. 649

ity as it now pays you for each item of "customer paper" in accordance with Article 18 of the existing agency contract of July 1, 1934.

Any deferred payment paper purchased by you in behalf of the Authority hereunder shall be subject to the same terms and conditions, and you will be subject to the same responsibilities for said deferred payment paper, as now [fol. 3268] exist with reference to "customer paper" under the aforesaid contract with you.

If you are willing to accept this offer and to act as the agent of the Electric Home and Farm Authority, Inc., in the extended financing plan above set forth, indicate your acceptance by the signature of your duly authorized officers in the places provided for herein and this offer shall thereupon become a binding contract effective as of the 1st day of July, 1934.

Electric Home and Farm Authority, Inc., (Signed) by David E. Lilienthal. W.C.F., Jr., Legal Division. Electric Home and Farm Authority, Inc., Trustee under a Trust Deed Executed in May, 1934, to Secure an Issue of Notes to Aggregate Not in Excess of Ten Million (\$10,000,000) Dollars, (Signed) by David E. Lilienthal. (Seal.)

Attest: (Signed) Charles E. Hoffman, Asst. Secretary.
Accepted this — day of —, 19—.

Tennessee Valley Authority (Signed) by Arthur E. Morgan, Chairman. (Seal.)

Attest: (Signed) Charles E Hoffman, Asst. Secretary.

[fol. 3269] COMPLAINANTS' EXHIBIT No. 650 (Excluded)

Electric Home and Farm Authority—Its plan for financing the retail purchase of electrical appliances:

Revised March 1937—Electric Home and Farm Authority.

This circular describes the time payment plan of Electric Home and Farm Authority for financing the retail purchase of electrical appliances.

Among the principal objectives of this program, in addition to offering a beneficial and necessary service to the

COMPLAINANTS' EXHIBIT No. 650 (Excluded)

users of electricity, is to lessen the burdens in the home and to increase efficiency on the farm, through the greater use of electricity. The beneficial effects of this program are felt not only by the actual consumers of electricity but also by the producers and distributors of electric power as well as manufacturers of and dealers in electrical appliances.

Electric utilities and appliance manufacturers participating in this plan realize that the way to increase appliance sales and the use of electricity is to provide a plan which makes their use feasible and economical. The utilities cooperating with Electric Home and Farm Authority are selling electricity at rates which make the use of appliances economical.

Electric Home and Farm Authority is not a manufacturing or a merchandising organization. It is interested in making the benefits of electricity more generally available through the greater use of electricity consuming appliances. It seeks to bring about cooperation among the electrical utilities and electric appliance manufacturers and the dealers with the view of accomplishing the widespread purchase and use of electricity and electric appliances.

How the Plan Operates

Utilities.—The program may be extended only to those areas where the rates for electricity are such as to make feasible the purchase and use of electrical appliances by families of average income. The plan is available to the customers of those publicly owned and privately owned electric utilities who enter into an agreement with Electric Home and Farm Authority. This agreement provides that the utility, as agent for the Authority, shall collect monthly installments on appliances financed through Electric Home and Farm Authority. The utility is reimbursed for this service. In addition, the agreement may provide for the utility to purchase for Electric Home and Farm Authority, customer contracts that are presented to it by authorized dealers; that is, dealers may present their retail customer sales contracts to the utility and receive cash immediately for the unpaid balance of the contracts. The funds so advanced to dealers are repaid to the utility by Electric Home and Farm Authority.

COMPLAINANTS' EXHIBIT No. 650 (Excluded)

[fol. 3270] If, for any reason, arrangements cannot be made for the utility to advance funds to the dealer, an agreement may be made whereby the customer contracts will be forwarded directly to Electric Home and Farm Authority. In these cases Electric Home and Farm Authority pays directly to the dealer the cash selling price of the appliance, minus the down payment and the utility collects the installments due.

Manufacturers.—All electrical appliances eligible for financing under this plan must be first approved by Electric Home and Farm Authority. A large number of manufacturers have received Electric Home and Farm Authority approvals on their products. Other manufacturers whose products have not been approved for financing, but who desire to participate in the plan, are invited to communicate with Electric Home and Farm Authority, Washington, D. C., and submit their products for consideration. The appliances which have been approved for financing up to this time are as follows:

Refrigerators, Ranges, Water Heaters, Water Pumps, Domestic Clothes Washers, Domestic Clothes Ironers, Cream Separators, Portable and permanent Motors, Dishwashers, Waste Disposal Units, Radios, Domestic Clothes Driers, Vacuum Cleaners, Bottle Coolers, Milk Coolers, Milking Machines.

Dealers.—Dealers wishing to obtain approval under the plan will submit an application in triplicate directly to Electric Home and Farm Authority, Washington, D. C. Application forms for this purpose may be secured from the Electric Home and Farm Authority offices or from the nearest cooperating utility. The dealer will be informed of the action on his application as a retailer under the plan at the earliest possible date. With their application retailers will sign the standard form of Electric Home and Farm Authority contract by which the retailer agrees to buy back, upon default, purchaser contracts sold by him to the Authority for a price equal to the unpaid balance less unearned discount on each contract repurchased.

Approved dealers may obtain without charge purchaser contract forms and time payment charts by Application to Electric Home and Farm Authority. These forms and

COMPLAINANTS' EXHIBIT No. 650 (Excluded)

charts may be obtained also from the nearest cooperating utility.

Electric Home and Farm Authority will not buy any purchaser's contract unless it is on the Authority's forms and unless the contracts comply with the latest Electric Home and Farm Authority chart of time payments.

The contract periods applicable to the appliances listed heretofore are as follows:

1. Water heaters, milk coolers, water pumps, cream separators, ranges, home and farm motors, refrigerators, domestic clothes ironers and driers—purchased individually—36 months maximum.

2. Combinations of any two or more appliances listed in No. 1—48 months maximum.

[fol. 3271] 3. Clothes washers or vacuum cleaners purchased individually or combined on one contract—24 months maximum.

4. Clothes washer or vacuum cleaner purchased with any one appliance listed in No. 1—36 months maximum.

5. Clothes washer or vacuum cleaner purchased with any two appliances in No. 1—48 months maximum.

6. Dishwashers—18 months maximum.

7. Waste disposal units—12 months maximum.

8. Bottle coolers—24 months maximum.

9. Milking machines—30 months maximum.

10. Radios (priced at \$100 or less)—12 months maximum.
Radios (priced at over \$100) 18 months maximum.

The minimum unpaid balance (retail price less down payment) of any contract financed through Electric Home and Farm Authority is \$40: The down payment on any contract must be at least 5 per cent, except the down payment on bottle coolers, milking machines, and radios, on which it shall be at least 10 per cent.

Consumers.—The routine of purchasing an approved electrical appliance and financing it under the Electric Home and Farm Authority plan is not unlike purchasing many

COMPLAINANTS' EXHIBIT No. 650 (Excluded)

other commodities on a plan of deferred payments. The customer, after selecting the approved appliances desired from a dealer participating in the program, merely makes an initial payment of 5 per cent or more of the cash retail price and executes an Electric Home and Farm Authority conditional sale contract. Monthly installments are payable to the utility at the same time the electric service bills are due. These payments are credited to the customer's account and forwarded to Electric Home and Farm Authority.

Utility companies, department stores, electrical equipment shops, dealers, and others who are in the business of retailing electrical appliances and serving the customers of a cooperating utility, may apply for an authorization to participate in this program.

Any additional information that may be required can be secured from Electric Home and Farm Authority, Washington, D. C.

[fol. 3272] COMPLAINANTS' EXHIBIT No. 651 (Excluded)

Circular No. 1, Electric Home & Farm Authority—Its Plan For Financing The Retail Purchase Of Electrical Appliances, May 1936.

To avoid repetition this exhibit is not set out herein at length. It is substantially the same as Complainants' Exhibit No. 650.

[fol. 3273] COMPLAINANTS' EXHIBIT No. 652 (Excluded)

(Omitted)

[fol. 3274] COMPLAINANTS' EXHIBIT No. 653 (Excluded)

Finance Plan of Electric Home and Farm Authority, Inc.

Electric Home and Farm Authority—The Program

This pamphlet describes the time payment plan of Electric Home and Farm Authority, Inc. (EHFA) for the purchase of electric appliances. The plan provides lower rates, smaller down payments and longer terms than previously have been available.

COMPLAINANTS' EXHIBIT No. 653 (Excluded)

The full program involves an utterly new approach to the whole problem of distribution and financing of electric appliances and the adjustment of rates for electricity. The major objective is a lessening of the burdens in the home and an increased efficiency on the farm through the greater use of electricity.

One of the first functions of the EHFA has been to convince electric utilities and appliance manufacturers that the way to increase appliance sales and the use of electricity is to reduce appliance prices and electric rates below prevailing levels, depending upon volume to bring a satisfactory profit to both.

As another function of the program, EHFA has undertaken, through educational work throughout the territory of its operations, to increase the demand for electric appliances and to bring about a greater usefulness of electricity for the householder and the farmer.

[fol. 3275] Utilities co-operating with EHFA have so adjusted electric rates as to make the use of appliances economical. These utilities have further indicated their willingness to assist in collecting installments on appliance sales at a low cost.

The program does not favor any manufacturer. All established manufacturers, operating in conformity with NRA, who wish to and who can meet provisions as to quality and price, may participate. It does not favor any utility. All utilities, publicly and privately-owned, in the territory who are willing to meet requirements as to rates and who are willing to undertake the obligations involved, are urged to participate.

It is equally open to all dealers. All dealers able to meet the necessary requirements will be eligible to participate. Every dealer is on the same footing as every other dealer and every utility merchandise department. Electric appliances will continue to be distributed through existing channels.

EHFA is not a manufacturing or a merchandising organization. It is interested only in promoting and financing sales of electric appliances to make electricity more generally available. It seeks to bring about cooperation among the electrical utilities and electric appliance manufacturers and the dealers as to rates and prices

[fol. 3276]

COMPLAINANTS' EXHIBIT No. 653 (Excluded)

with a view to accomplishing the widespread purchase and use of appliances at fair profits to all.

To best accomplish the purpose of this plan, complete co-operation must be had among:

Consumers,
Retailers,
Manufacturers,
Utilities.

The EHFA Time Purchase Plan

Electric Home and Farm Authority has approved certain electric appliances, manufactured to a standard of specifications established by the Authority, and will from time to time approve the products of other manufacturers who qualify. The manufacturers are authorized to place on these products the emblem of the Authority. EHFA will finance time payment sales of emblem appliances, as well as other models of domestic appliances where the manufacturers have an approved model of the same type in their line, and through retailers who have been approved under the Authority's plan. This means that a manufacturer who has an approved refrigerator in his line may have the sales of other domestic models of refrigerators which he manufactures financed through EHFA. This same policy applies to all appliances approved by the Authority.

Retailers wishing to obtain approval under the plan will apply direct to EHFA. The dealer will be informed of his approval as a retailer under the plan at the earliest possible date. With their application, retailers will sign the standard form of EHFA contract by which the retailer agrees to buy back, upon default, purchaser contracts sold by him to the Authority.

Because of the unusual advantages offered it will be necessary to remove dealers from approved lists if they fail to comply within ten days after a request by the Authority to repurchase a contract.

EHFA has made arrangements with a group of electric utilities by which these utilities will co-operate under the plan. Since purchasers desiring to take advantage of the finance plan will be billed along with their monthly electric bill, the finance program will be limited to sales to pur-

COMPLAINANTS' EXHIBIT No. 653 (Excluded)

chasers served by electric utilities cooperating in the program.

Approved dealers may obtain without charge purchaser contract forms and Time Payment Charts by application to EHFA. These forms and charts may be obtained also from the nearest co-operating utility.

EHFA will not buy any purchaser's contract unless it is [fol. 3278] on the Authority's forms and unless the contracts comply with the latest EHFA chart of time-payments.

The purchaser's contract period must be 36 months or less on one appliance, 48 months or less on more than one appliance. The down payment on each contract must meet requirements set out in the Official Time Payment Chart. The monthly payment must be not less than \$2.00.

Purchaser contracts will be presented by the retailer to the utility, which will forward them to EHFA. The utility is authorized in most cases to pay the retailer immediately for contracts so tendered. In other cases, the utility is required by EHFA regulations to forward the purchaser's contracts to the Authority before making payment to the retailer.

A retailer may elect to carry his own EHFA paper but if he sells any such paper to EHFA he will be required to offer to EHFA all EHFA paper thereafter taken by him until he has given 30 days notice that he intends to carry his own EHFA paper. A retailer will not be permitted to sell any EHFA paper to anyone else unless each contract is first offered to EHFA.

EHFA will not generally record installment contracts. Retailer may record contracts for his own protection.

EHFA may call on the retailer to repurchase a contract prior to the time provided in the retailer's contract with [fol. 3279] EHFA. Retailer will not, without consent of EHFA, repossess any appliance until he has repurchased the contract from the Authority. Retailer's cooperation will be expected in collecting accounts which are not paid after the sending of the first notice to purchaser.

Approved retailers will be permitted to use the EHFA insignia in advertising, subject to the Authority's rules and regulations.

EHFA is co-operating with retailers, manufacturers and distributors, through education and demonstrations or such

COMPLAINANTS' EXHIBIT No. 653 (Excluded)

other means as deemed advisable, to promote the wide distribution of electric appliances.

Retailers are urged to apply direct to EHFA for any information or assistance they may need in operating under the EHFA plan.

How to Operate under the EHFA Plan

1. Make application for approval on EHFA application form (either direct or through distributor or utility).
2. Upon notice of approval from EHFA, obtain from utility or EHFA (at no cost to you) purchaser contract forms and EHFA Time Payment Charts. Contracts on other than Authority forms will not be accepted.
3. Negotiate your sale, obtaining as large a down payment as possible. (See Official Time Payment Chart as to requirements of minimum down payment). Follow carefully instructions in filling out purchaser contract forms. Only forms completely and properly filled out will be accepted.
4. Purchaser's credit statement must be filled out in full. Send in any other information on purchaser which leads you to believe purchaser a good credit risk. It is recommended that delivery be withheld until full information is obtained and you are confident that purchaser is acceptable. You may make inquiry of utility for any credit information it may have available.
5. Make sure that purchaser is using electric service of a utility which is co-operating under the EHFA plan and that the appliance is to be installed in a residence for domestic use.
6. Make sure that the time balance conforms with the EHFA rate chart; that the contract term is not over 36 months if for one appliance, or 48 months if for two or more; that the monthly installment is at least \$2.00 on each contract; and that the down payment meets the requirements stated in the Official Time Payment Chart.
7. When you are sure of acceptability, get signature of purchaser on contract, making certain that the purchaser

COMPLAINANTS' EXHIBIT No. 653 (Excluded)

[fol. 3281] understands fully the terms of the contract, and deliver the appliance.

8. Forward promptly the executed contract in duplicate, properly assigned by you, to the office of the utility where the purchaser's bill for electric service is payable.

9. If you have any reason at any time to feel that action against the purchaser is necessary to save Electric Home and Farm Authority or yourself from loss under this plan, please communicate promptly with utility and with the Authority.

10. Retailers are to report monthly to EHFA their sales for the previous month, on forms supplied by EHFA, and such other reports or information as may be required from time to time.

This pamphlet is explanatory only and nothing herein contained shall impose any obligation of any nature whatsoever upon the Electric Home and Farm Authority, Inc.

EHFA Press and Publications.

Form 113 Revised April 5, 1935.

[fol. 3282] **COMPLAINANTS' EXHIBIT No. 654 (Excluded)**

To avoid repetition this exhibit is not set out herein at length. It is substantially the same as Complainants' Exhibit No. 653.

[fol. 3283] **COMPLAINANTS' EXHIBIT No. 655 (Excluded)**

TVA—Electricity for All

"A Realization for all the people of the benefits electricity brings—in lightening their burdens, in increasing their incomes, in making for a richer and better life."

Look at the towers of a great transmission line. There goes electricity in large quantities * * * through woods, across fields, over the distant hillsides.

COMPLAINANTS' EXHIBIT No. 655 (Excluded)

Formerly only a small portion of the power carried in such a line entered private homes. The home owner used very little current . . . he was content if he had electric lights and a few small appliances . . . a toaster, a fan, an electric iron.

Today electricity in large quantities is going into homes. Not just electricity for lights and a few small appliances, but electricity in large enough quantities—and at low enough rates—to do heavy work.

That power in a great transmission line will cook food . . . heat and pump water . . . freeze ice. Well-cooked food, firm butter, cool milk, health, comfort, and cleanliness for you and your children . . . and all at the turn of a switch . . . this is the promise of cheap electricity for every American family.

This little booklet will tell you how your Government, through Electric Home and Farm Authority, is trying to bring you the full benefits of low-cost electricity.

By order of the President of the United States in December, 1933, a new kind of governmental agency was created. It is known as Electric Home and Farm Authority. Its directors are the directors of the Tennessee Valley Authority, and it is allied in spirit and policy with that great national undertaking in the Tennessee River basin.

The certificate of incorporation summarizes the objectives of Electric Home and Farm Authority. The agency was established, "to advance the general economic welfare of the nation" by developing and fostering and increased use of electric power through the double reduction of the cost of electricity to the consumer and the cost of electric appliances.

Electric Home and Farm Authority has obtained agreements from the principal electric equipment manufacturers of the country by which standard quality appliances are now manufactured for you at very low prices.

These appliances bear the emblem carried on the cover of this booklet. They are sold as other electric merchandise is sold through existing dealers who have made contracts with EHFA. Sale of emblem appliances is restricted [fol. 3284] to communities served by electric utilities which

COMPLAINANTS' EXHIBIT No. 655 (Excluded)

in co-operating with the Authority have lowered their rates for current.

They are financed on term payments through the EHFA finance plan, which permits purchase of a single appliance over a period of three years or less. The interest rate on the unpaid balance of the cash-sales price is low. The down payment and monthly payment vary, but they cannot be less than \$2 down nor less than \$2 a month.

On an appliance, the emblem means that the product has been manufactured to quality standards set by EHFA, that it is priced reasonably, and that it can be financed by EHFA. Emblem appliances now are electric refrigerators, ranges and water heaters. These appliances are on sale in the area of the Tennessee Valley.

Should you desire to purchase an emblem appliance you would go to your regular — or retailer and select it. You would then sign a purchase contract and make your down payment.

The unpaid balance, including the finance charges, will be divided into equal monthly installments and collected, by the electric company which served you with electricity, at the same time you pay your light bill. The payments you make will be turned over to EHFA by the electric company.

Electric Home and Farm Authority will maintain several display rooms and conduct demonstrations of the uses of electricity in the home and on the farm. But it will not sell or distribute appliances.

In order to be sure that the use of equipment such as electric ranges, refrigerators and water heaters is feasible for householders and farmers of average income, Electric Home and Farm Authority must have a rate agreement with the utility serving the area before it will finance the emblem appliances.

The Authority must approve the domestic and farm electric rates as being sufficiently low to warrant a wider use of house appliances. As the use of appliances increases and there is a much greater consumption of electricity in the home and on the farm, further rate reductions may become possible.

A wider use of electricity will mean that a great natural resource becomes a servant in your home.

COMPLAINANTS' EXHIBIT No. 655 (Excluded)

Thus there are two major objectives of Electric Home and Farm Authority:

One—standard quality appliances reasonably priced;

Two—low electric rates for home and farm.

[fol. 3285] There is a third objective for which this emblem stands. That is a wider use of electricity through use of all electric appliances—those which bear the emblem on an appliance does not mean that it is not a part of this program of electrification.

By purchase of refrigerators, ranges and water heaters which bear the emblem, families of average income may enjoy the full benefits of electricity. For other families larger sizes and different types may be more suitable.

“Electricity for All.”

That slogan, appearing on the emblem sums up the aim of Electric Home and Farm Authority.

Fulfillment of this aim is possible only by:

—obtaining reductions in electric rates through agreements with utilities, publicly and privately owned, so as to make the use of efficient, low-priced electrical equipment feasible for the householder or farmer of low or average income.

—By assisting in financing the consumer in the purchase of this equipment.

—By engaging in educational work in the use of appliances, and research to further lower the manufacturing costs of electrical equipment, and to still better adapt it to the needs of the average home and farm.

—By encouraging and stimulating the production of new and better designs in appliances.

—By assisting the manufacturers in their tests for quality and performance so that both makers and purchasers always will be assured that the approved appliances represent the best values manufacturers can produce at the prices asked.

Any question you may have about this program and how it can benefit you, will be gladly answered by your electric dealer. Or you may address your inquiries to Electric Home and Farm Authority, Chattanooga, Tennessee.

[fol. 3286] COMPLAINANTS' EXHIBIT No. 656 (Excluded)

Electric Home and Farm Authority, Washington
June 14, 1937

Territories in Which EHFA Financing Facilities Are
Available

1. Municipally Owned Systems:

Athens, Alabama	Lansing, Michigan
Florence, Alabama	Amory, Mississippi
*Muscle Shoals, Alabama	Greenwood, Mississippi
Sheffield, Alabama	Holly Springs, Mississippi
Tuscumbia, Alabama	New Albany, Mississippi
Burbank, California	(Including rural lines in
Los Angeles, California	Tippah, Benton and Union
Jacksonville, Florida	Cos., Mississippi)
Barnesville, Georgia	Okolona, Mississippi
Cartersville, Georgia	Oxford, Mississippi
Dalton, Georgia	Tupelo, Mississippi
*Elberton, Georgia	*Fairbury, Nebraska
Fitzgerald, Georgia	Orrville, Ohio
Griffin, Georgia	Bolivar, Tennessee
*LaFayette, Georgia	Cookeville, Tennessee
Mairetta, Georgia	*Covington, Tennessee
Springfield, Illinois	Dayton, Tennessee
Crawfordsville, Indiana	Dickson, Tennessee
Fort Wayne, Indiana	Ducktown, Tennessee
Frankfort, Indiana	Dyersburg, Tennessee
Goshen, Indiana	Lebanon, Tennessee

[fol. 3287]

Rensselaer, Indiana	Milan, Tennessee
Richmond, Indiana	Pulaski, Tennessee
Kansas City, Kansas	Somerville, Tennessee

2. Privately Owned Systems:

Hartford Electric Light Co.	Iowa Electric Light & Pr. Co.
Hartford, Connecticut	Cedar Rapids, Iowa
Georgia Power Co.	Minneapolis General Electric Co.
Atlanta, Georgia	Minneapolis, Minnesota
Suburban Electric Corp.	Northern States Power Co. of Minn.
Dunlap, Illinois	Minneapolis, Minnesota
Elizabeth Lt. & Pr. Co.	Northern States Power Co. of N. J.
Galena, Illinois	Minneapolis, Minnesota
Interstate Lt. & Pr. Co.	St. Croix Falls Minne-
of Delaware	sota Improvement Co.

* Indicates additions to list since previous announcement.

COMPLAINANTS' EXHIBIT No. 656 (Excluded)

Electric Home and Farm Authority, Washington—June 14,
1937—Territories in Which EHFA Financing Facilities
Are Available—Continued

2. Privately Owned Systems:

Galena, Illinois	Minneapolis, Minnesota
Interstate Lt. & Pr. Co.	Western Wisconsin
of Wisconsin	Power Co.
Galena, Illinois	Minneapolis, Minnesota
Indiana Service Corporation	Elkhorn Valley Power Co.
Fort Wayne, Indiana	Scribner, Nebraska
Etowah Water & Light Co.	Midland Public Service Co.
Etowah, Tennessee	Eau Claire, Wisconsin
Franklin Pr. & Lt. Co.	Northern States Pr. Co.
Franklin, Tennessee	of Wisconsin, Eau Claire
Knoxville, Power Co.	Wisconsin
Alcoa, Tennessee	St. Croix Falls, Wisconsin
Tennessee Electric Power Co.	Improvement Co., St.
	Croix
Chattanooga, Tennessee	Falls, Wisconsin

[fol. 3288] 3. Electric Power Associations & Cooperatives:

Cullman County Elec. Member- ship Corp.	Booneville, Mississippi
Cullman, Alabama	Alcorn County Elec. Power
Imperial Irrigation District	Assn.
	Corinth, Mississippi
Imperial, California	Tishomingo County Elec.
*Grand Valley Rural Power	Power Assn.
Lines, Inc.	Iuka, Mississippi
Grand Junction, Colorado	Pontotoc County Elec. Power
North Georgia Elec. Member- ship Corp.	Assn.
Dalton, Georgia	Pontotoc, Mississippi
*The Troup County Rural	Tomgibgee Elec. Power Assn.
Electrification Corp.,	Tupelo, Miss. (Lee & Ita-
LaGrange, Georgia	wamba Counties, Mississippi)
*Toombs County Rural Electri- fication Association, Lyons, Georgia	Eastern Nebraska Public
Whitley County Rural Elec	Power
Membership Corp., Columbia	
City, Indiana	District, Lincoln, Nebraska
Prentiss County Elec. Power	
Assn.	Pickwick Electric Membership
	Corp. Adamsville, Tenn.
	(Chester, McNairy and Hardin
	Counties, Miss.)

* Indicates additions to list since previous announcement.

COMPLAINANTS' EXHIBIT No. 656 (Excluded)

Electric Home and Farm Authority, Washington—June 14, 1937—Territories in Which EHFA Financing Facilities Are Available—Continued

3. Electric Power Associations & Cooperatives:—Continued

*Huntington County Rural Electric Membership Corporation
Huntington, Indiana

Boone County Rural Electric Membership Corp., Lebanon
Indiana

*Shelby County Rural Electric Membership Corporation,
Shelbyville, Indiana

*The Menard Electric Cooperative Petersburg, Illinois

Eastern Iowa Light & Power Corp. Davenport, Iowa
Pioneer Rural Elec Cooperative Inc., Piqua, Ohio (Incorporating Shelby, Miami and Champaign Counties)

Southwest Tennessee Electric Membership Corp., Brownsville, Tennessee.

Meigs County Electric Membership Corp., Decatur, Tennessee

Middle Tennessee Electric Membership Corp.,
Murfreesboro, Tennessee

Duck River Electric Membership Corp., Shelbyville, Tennessee.

Gibson County Electric Membership Corp., Trenton, Tennessee
Farmers Rural Utilities Inc.
Bowling Green, Virginia
Columbus Rural Electric Cooperative, Columbus, Wisconsin

[fol. 3289] Lorain-Medina Rural Electric Cooperative Inc.,
Wellington, Ohio

Monroe County Electric Power Association Amory, Mississippi

Richland Cooperative Electric,
Assn Richland Center,
Wisconsin

4. Rural electric lines in Lauderdale, Colbert, Franklin, Lawrence, Limestone and Morgan Counties, Alabama.

5. Pickwick Landing Dam) Employees of TVA residing in these locations may finance the purchase of appliances through EHFA over a maximum period of twenty-four months from February 7, 1936.
Chickamauga Dam)

6. Guntersville Dam) Employees of TVA residing in this location may finance the purchase of appliances through EHFA over a maximum period of twenty-four months from March 18, 1936.

* Indicates additions to list since previous announcement.

COMPLAINANTS' EXHIBIT No. 656 (Excluded)

The time limitations notes in paragraphs 5 and 6 are due to the temporary nature of the work being done by a large number of the employees in these areas.

• Additions to this List:

Electric Power Associations & Cooperatives
Colquitt County Rural Electric Co.
Moultrie, Georgia
Carroll Rural Electric Association,
Carrollton, Georgia
Joe Wheeler Electric Membership Corporation
Hartselle, Alabama
Meeker Cooperative Light & Power Association,
Litchfield, Minnesota

[fol. 3290] COMPLAINANTS' EXHIBIT No. 657 (Excluded)

Tennessee Valley Authority

Office Memorandum

To: Mr. G. D. Munger, Commercial Manager, EHFA.
Chattanooga, Tenn.

From: Guy W. Thaxton, Division Engineer, Tupelo, Miss.

Date: Sept. 14, 1934.

Subject: Utilization of Traveling Kitchen as Load Builder.

This will acknowledge receipt of your letter of the 11th on this subject. In view of the many suggestions incorporated therein, and the fact that the program is already under way and making progress, I will discuss these things with you when I am in Chattanooga next week.

Guy W. Thaxton.

GWT/mi.

EHFA. Received Sept. 15, 1934. Central Files.

[fol. 3291] COMPLAINANTS' EXHIBIT No. 658 (Excluded)

Mr. Guy W. Thaxton, TVA, Tupelo.

G. D. Munger, Commercial Manager, EHFA.

September 11, 1934.

Utilization of Traveling Kitchen as Loan Builder

As a result of Miss Davison's inspection of the first traveling kitchen demonstration at Booneville, certain rec-

COMPLAINANTS' EXHIBIT No. 658 (Excluded)

ommendations were made to me for the effective utilization of this project as a load builder. I have transmitted these recommendations to Mr. Sullivan who asks me, because his time is so taken up at this period, to forward the suggestions to you.

Miss Davison reported that there was a very enthusiastic turn-out at Booneville, over 300 people attending the three demonstrations—although dealers had maintained that not more than 150 or so could be expected. The visitors asked many questions and appeared to be keenly interested in the talk of Miss Frow, the demonstrator.

Each visitor to the Booneville demonstration made out a card giving name and address and what appliances the visitor was interested in. I am herewith transmitting to you the cards for the first two Booneville demonstrations. These people should be followed up at once. A rough calculation shows that if all the appliances which are noted on these [fol. 3292] cards were put into service, load in this one small area would be increased by 120,000 kwh a year.

Miss Davison believes that a home economics agent should be detached from present duties in your area so as to act as an advance agent for the visits of this kitchen in each town on the route. The duties of this agent would be to organize local groups, such as the P-T-A and the women's clubs, back of the project. If the president of the women's club and a leader of the P-T-A were to act as hostesses for the kitchen demonstration, it is felt that an even more cordial reception would be given the work. The advance agent should call on such leaders immediately in advance of the visit of the kitchen and visit the county and home demonstration agents if such persons are located in the town and endeavor to mass all such support solidly behind the project.

Many of the women who attended the Booneville demonstration reported themselves as owning electric equipment which was out of service for one reason or another. I believe it would be worth while to assign on — to check on unused equipment immediately after each demonstration. If only a small part of this unused equipment is brought back into service, there will be an appreciable effect upon load.

COMPLAINANTS' EXHIBIT No. 658 (Excluded)

EHFA. Received Sep. 11, 1934, Central Files.

[fol. 3293] I believe that this kitchen project can be made to return immediate results in load if the above suggestions are followed out. Both Mr. Rogers and Mr. Dorsey have carried out preliminary contacts in a satisfactory manner, but it is perhaps advisable now that actual demonstrations are under way to attempt to engage dealers more fully in the program. I suggest that an Electric Home Representative be on the ground at the time of each demonstration to further dealer cooperation in the program.

We are going to attach another demonstrator to the project as an assistant to Miss Frow. This will be Miss Wilson, who will be transferred from her present duties in Alabama. The plan as it stands is to visit two towns a week, with a day's interval usually falling on Wednesday of each week to allow for moving the kitchen to the next location. Two demonstrations a day will be held in each town, a typical schedule being as follows:

Morning of first day—Demonstration for High School Home Economics class.

Afternoon—General Demonstration.

Morning of second day—Demonstration for colored cooks.

Afternoon—General Demonstration.

We hope to be able to finish each week's work with a Saturday stand at a county seat where the kitchen can be [fol. 3294] visited by rural people as an exhibit, but without actual demonstrations being conducted.

I am attaching the revised itinerary for the truck up to September 22. The itinerary for the week of September 24 to 29 Mr. Dorsey promises to furnish us within the next few days. During the week of October 1 to 6 the kitchen will be on the fair ground at Tupelo. I shall be obliged if you will transmit this schedule to the home economics agent suggested above as advance worker so that she can visit the towns on the route at proper intervals before the kitchen arrives. The schedule will also enable you to follow up on service work and, in general, should permit you to tie this project in thoroughly as an effective load builder for the Mississippi territory.

COMPLAINANTS' EXHIBIT No. 658 (Excluded)

A program of this sort has consistently brought returns to utility companies. If we make aggressive use of this program, beginning at once, I am sure we can secure very satisfactory results for our efforts in terms of added load on the Mississippi system before the end of the year.

G. D. Munger.

[fol. 3295] COMPLAINANTS' EXHIBIT No. 659 (Excluded)

Mr. A. H. Sullivan, Assistant Chief Electrical Engineer.
G. D. Munger, Commercial Manager, EHFA.

September 7, 1934.

Recommendations for Effective Use of Traveling Kitchen as Load Builder in TVA Territory.

Miss Davison has reported that there was a very enthusiastic and marked response to the traveling electric kitchen project during its first showing at Booneville, Mississippi. She believes the program can be made to show immediate returns to the Mississippi area in terms of load if the project is properly tied in with local interests and with the operation as a whole.

It is recommended that a home demonstration agent be detached from present duties in Mississippi and transferred to the kitchen project as an advance organizer of local groups in each town on the schedule of the kitchen. The duties of this person would be to organize key people in towns visited behind the kitchen. Such persons would be the president of the local women's club and the president of the Parent-Teachers Association, as backers of the program and to induce such persons to act as hostesses at the demonstration. Such local backing can be made to have an immediate effect in load.

It is further recommended that a service man be assigned to follow up the program of the kitchen so as to check on [fol. 3296] unused home electric equipment. Miss Davison reports a large amount of equipment out of service in towns in area to be visited by the truck. She feels that a service

COMPLAINANTS' EXHIBIT No. 659 (Excluded)

follow-up in connection with the interest aroused by the visit of the kitchen would bring much of this unused equipment back into line. This activity will assist in building load.

It is recommended that the local field representatives continue their calls on dealers in the towns to be visited, but with a more intensive effort to draw dealer customers to the demonstration.

We propose to add a second demonstrator to the project so that the demonstrations themselves may be carried through more intensively. Two-day stands will be the rule for each town visited. On the morning of the first day the high school economics class will visit the kitchen; in the afternoon the general demonstration to the public will be held. On the morning of the second day a class will be held for colored cooks; in the afternoon, the second public demonstration. The duties of the advance home demonstration agent would be organizing these showings so thoroughly behind local leaders that not one opportunity is overlooked in each town visited for drawing all possible attention to home electrification. It is proposed in addition to hold one evening meeting in each town to which men might come and, if possible, to end each week's work with a Saturday stand at a county seat.

[fol. 3297] The drawing power of the truck has proved itself and should be effectively capitalized in relation to load.

At each demonstration registration cards listing appliances in which visitors are interested are filled out. This is a detailed record. Immediately after the truck leaves the town, an aggressive canvass should be made on items noted on the cards, and to interest people further in the purchase of load building appliances.

If the program outlined above is followed through in an active way and beginning at once, I feel that this project will return results which will be definitely measurable for the territory involved before the first of the year.

G. D. Munger.

EHFA. Received Sep. 7, 1934, Central Files.

[fol. 3293] COMPLAINANTS' EXHIBIT No. 660 (Excluded)

Mr. Guy W. Thaxton, Division Engineer, Tupelo.
W. I. Nichols, Administrative Assistant, Chattanooga.

March 1, 1935.

Merchandise Sales

I attach herewith copy of a letter sent today to Mr. Warner in regard to the Pontotoc County Electric Power Association. After some delay, I have been requested to consult with the division engineers in regard to plans for future activity and I am planning to be in Mississippi next week. At that time I hope that it will be possible to get your ideas on future organization and activities. In the meanwhile, I am very anxious to get the suggestions and ideas of the field staff and if it meets with your approval, I would appreciate it very much if you would ask them to express their ideas along the lines of the attached memorandum.

I am enclosing six copies and I would appreciate it very much if you could distribute them to Messrs. Warner, Halsey, Bridges and Ludeman, Mrs. Tandy and Miss Frow, and ask them to forward their suggestions to me in Chattanooga by March 12.

W. I. Nichols.

WIN:mld.

EHFA. Received March 21, 1935, Central Files.

[fol. 3299] COMPLAINANTS' EXHIBIT No. 661 (Excluded)

Tennessee Valley Authority

Office Memorandum

To: Mr. Henry D. Brite, Asst. to Commercial Manager, Chattanooga.

From: H. A. Warner, TVA, Tupelo.

Date: February 27, 1935.

Subject: Pontotoc County Electric Power Association.

As you may know already this Association has been organized and set up and will take charge of all electric dis-

COMPLAINANTS' EXHIBIT No. 661 (Excluded)

tribution in its territory on March 1st. Its relation with us will be similar in every way to those of the A. C. E. Power Association, with the exception that the Pontotoc Association plans to merchandise electrical appliances to its members.

We are desirous of signing up this Association on the stand- form of EHFA Utility Contract, and very much desire to have a supply of these contracts sent to us for handling this matter with them. If you will assist us in this matter by securing them and forwarding them to us it will be appreciated.

H. A. Warner.

HAW/rp.

EHFA. Received Mar. 21, 1935, Central Files.

[fol. 3300] COMPLAINANTS' EXHIBIT No. 662 (Excluded)

Mr. H. A. Warner, TVA, Tupelo, Mississippi.

Henry D. Brite.

February 28, 1935. 2

I have referred your memorandum of February 27 to Mr. W. I. Nichols, who has recently been appointed to the Electricity Division and who will handle some of the work in TVA territory that was formerly handled by EHFA.

Mr. Nichols is planning to be in northeastern Mississippi the early part of next week and has told me today that he is desirous of discussing the Pontotoc situation with you and others. For this reason, I am enclosing copies of the utility agreement only because, as before stated, Mr. Nichols desires to discuss the merchandising question with you.

Henry D. Brite.

HDB:DH.

Enclosure.

EHFA. Received Mar. 11, 1935, Central Files.

3578

[fol. 3301] COMPLAINANTS' EXHIBIT No. 663 (Excluded)

Mr. H. A. Warner, Commercial Field Superintendent,
Tupelo.

W. I. Nichols, Administrative Assistant.

March 1, 1935.

Pontotoc County Electric Power Association

Mr. Bright has just referred to me your letter of February 27 in regard to the Pontotoc County Electric Power Association. The proposed merchandise activity of the County Association raised certain questions of policy on which I am anxious to have your opinion and Mr. Munger has asked me to go into this matter with you. At the request of Mr. Evans, I am planning to be in the Mississippi area next week and at that time I hope we can meet and go over the situation together.

W. I. Nichols.

WIN: mld.

cc: H. F. Bright, Guy W. Thaxton.

EHFA. Received Mar. 1, 1935, Central Files.

[fol. 3302] COMPLAINANTS' EXHIBIT No. 664 (Excluded)

Mr. Guy W. Thaxton, % TVA, Tupelo, Miss.

Mr. G. D. Munger, Electric Home & Farm Authority, Knoxville, Tenn.

April 30, 1934.

Mr. Brite has informed me that you wanted me to come to Tupelo relative to the site for the new store, and to assist in putting the men to work.

There are several matters here in Knoxville which require my personal attention, such as the time payment contracts, instructions to dealers, instructions to manufacturers and etc. As soon as these plans have been worked out, and the forms have been printed, Mr. Carr and I intend to come to Tupelo in order to explain them to the salesmen and the dealers. I expect that this will be the first of next week.

COMPLAINANTS' EXHIBIT No. 664 (Excluded)

In connection with the celebration which we were discussing Mr. Lilienthal feels that he would be able to come to Tupelo perhaps on Thursday, May 24th, and thinks that probably this celebration could be postponed until that week. This would not mean that our representatives could not start work before that time.

You will be interested to know that the three directors are to speak over a national hook-up on May 22nd. I do not know yet at just what time this will be. Each one of [fol. 3303] them is to have six minutes. It is Mr. Lilienthal's idea to make considerable mention of the Tupelo project, and I thought that it could be capitalized by having loud speakers placed in prominent locations and used as part of the program during this celebration week. If we could get the city to promote this celebration week, I believe it would react to our benefit rather than for the T. V. A. to sponsor it. I believe that these are details which we can work out at our next meeting.

G. D. Munger.

GDM/HDB/neh.

[fol. 3304] COMPLAINANTS' EXHIBIT No. 665 (Excluded)

Tennessee Valley Authority

Office Memorandum

To: Mr. G. D. Munger, Chattanooga.

From: Guy W. Thaxton, Tupelo.

Date: May 9, 1934.

Subject: —.

Mr. Wank the architect, was here yesterday and I was very much disappointed in the information which he gave as to the prospects of being able to arrange this place so that the opening could be held as scheduled.

In a telephone conversation with Mr. Evans this morning, I reported this fact and he and I agreed that we would go ahead and open on the 21, regardless of everything. He told me that it would be necessary to stick to that date now, as Mr. Lillienthal had arranged to be with us on the 25th.

COMPLAINANTS' EXHIBIT No. 665 (Excluded)

Since everything which is to be done to the building will have to be done by us here on the ground, I suggest that you come here at once, prepared to stay long enough to help me arrive at definite conclusions as to what should be done.

Guy W. Thaxton, Division Engineer.

GWT:k.

[fol. 3305] COMPLAINANTS' EXHIBIT No. 666 (Excluded)

Tennessee Valley Authority

Office Memorandum

To: Mr. George D. Munger, E. H. & F., A., Knoxville.

From: Guy W. Thaxton, Tupelo.

Date: May 1, 1934.

Subject: Exhibition and Demonstration.

In connection with our program to be put on during the week beginning May 14, I have several points to bring to your attention.

In order to boost the attendance and keep up the interest throughout the entire week, I think it would be well for us to give a prize each day for the four days when demonstrations will be given, viz: Tuesday, Wednesday, Thursday and Friday.

I have asked Mrs. Tandy to prepare a four-day program containing a demonstration of one hour to one and a half hour's duration, each of these four afternoons. I think it would be well for us to award a prize each afternoon.

Another point is in connection with kitchen utensils. In order to hold this mass demonstration and to do some of [fol. 3306] the other work which our specialists will be called upon to do, it will be necessary for us to have a complete set of kitchen utensils put up in some kind of a kit, so as to be readily transportable. If you will tell me how to handle this purchase, I will have Mrs. Tandy work up a list of items needed and will enter the requisition therefor immediately so that everything will be on hand when needed.

COMPLAINANTS' EXHIBIT No. 666 (Excluded)

In connection with this work, it is going to be necessary to have a maid to assist Mrs. Tandy while the demonstrations are under way. I am planning to handle this on emergency employment basis.

Guy W. Thaxton, Division Engineer.

GWT:k.

[fol. 3307] COMPLAINANTS' EXHIBIT No. 667 (Excluded)

May 24, 1934.

Mr. Roland A. Wank, Tennessee Valley Authority, Knoxville, Tenn.

DEAR MR. WANK:

I would like to tell you how much we appreciate the work of Mr. Stanley Reese in helping us last week in the preparation of the Tupelo display center.

Mr. Reese's assistance was extremely valuable, not alone in supervision of construction but in many details as well in connection with placing the contract and handling labor on the job. He secured cooperation from all of the men engaged for the work. As construction proceeded day and night the factor of cooperation became extremely important. I feel it is only justice to Mr. Reese to say that without him the job could not have been finished in so short a time nor so well.

Also we would like to extend our thanks to you and the other members of your staff at Knoxville who assisted in drawing the plans.

The display center is very attractive and I am sure will be a credit in the Northern Mississippi region to the two authorities.

Very truly yours, Electric Home and Farm Authority, by W. B. Phillips.

P:j.

[fol. 3308] COMPLAINANTS' EXHIBIT No. 668 (Excluded)

Tennessee Valley Authority

Office Memorandum

To: Mr. G. D. Munger, Electric Home and Farm Authority, Knoxville.

From: Guy W. Thaxton, Tupelo, Mississippi.

Date: May 3, 1934.

Subject: —.

With reference to your letter of April 30, as I explained to you over the telephone, I regret very much to see this opening celebration of ours postponed another week. However, if you people there think best to postpone it, it will be all right with me. It really does give me a little difficulty in finding something for the Electric Home and Farm Authority specialists to do.

Today and tomorrow, I am putting them through the Home Lighting School, which is being conducted by the representatives of the Westinghouse Lamp Company and from which I expect that they will secure a great deal of valuable information to better equip them to perform their duties as Electric Home Specialists, exponents of the art of living electrically.

I am having the names of the customers here taken from the tabulation of the survey which was made, and divided into lists to be used by the Electric Home and Farm Authority Specialists. Mrs. Tandy will be started immediately [fol. 3309] after the end of our lighting school, on the job of contacting and helping the present owners of electric ranges. Mrs. Bradley will campaign here.

The men will be provided with the lists which we are preparing and will be started out Monday morning on a definite program of beginning to contact the people, in spite of the fact that the dealers here do not as yet have stocks of TVA appliances and we have not yet given the dealers or the people the answers to the questions which they are asking with regard to the financing plan.

If you think we should further delay this work, please let me know immediately upon receipt of this letter.

I trust that you will let nothing prevent you from making the trip down here at the earliest possible moment, and in

COMPLAINANTS' EXHIBIT No. 668 (Excluded)

the meantime, I am awaiting the coming of Mr. Wank, the architect, so as to make some final negotiations with the people from whom we expect to rent offices.

Guy W. Thaxton, Division Engineer.

GWT:k.

[fol. 3310] COMPLAINANTS' EXHIBIT No. 669 (Excluded)

Tennessee Valley Authority

Office Memorandum

To: Mr. G. D. Munger, Commercial Manager, EHFA, Chattanooga.

From: H. A. Warner, Tupelo.

Date: November 3, 1934.

Subject: EH&FA Financing for Rural Customers.

Many present and prospective customers living along rural lines receive the bulk of their annual cash income at one time each year, usually in the fall when harvested crops are sold. This contrasts sharply with urban customers whose incomes are received monthly and often weekly.

It is believed that a financing plan that would best fit into the rural customers' needs would be worth while. We would like to offer for consideration a suggested plan as follows:

The rural customer purchases on a 36 months Conditional Sale Contract making a down payment equal to the minimum specified Down Payment plus the monthly payments for the first twelve-months period of the contract. One year later the purchaser pays in one lump sum the monthly payments for the second twelve-months period. Two years later the purchaser pays in one lump sum the monthly payments for the third twelve-months period. When the third [fol. 3311] and final payment is made the amount can be adjusted to compensate purchaser for the unearned finance charges incident to completion of contract before expiration date.

This suggested plan would appear to satisfy the following conditions:

Meet the financial condition of the rural customer; Split the total cost into three annual payments, each approxi-

COMPLAINANTS' EXHIBIT No. 669 (Excluded)

mately one-third of the total; Provide a very satisfactory cash, or down payment; Avoid any past due monthly payments; The dealer's position as to credit and endorsement is not affected.

This suggestion in effect obtains a much larger down payment than usual and leaves an approximate two-thirds of contract price as the Unpaid Balance although the Contract would indicate that some 96% of cash delivered price is the unpaid balance. This would appear to be necessary in order to avoid showing any monthly payments as being in arrears. The rural purchaser is slightly penalized under this plan to the extent that he has paid twelve monthly payments in advance instead of paying each as it became due each succeeding month. We do not think it a strong argument against the plan.

We appreciate that there may be other factors with which we are not familiar which may indicate the necessity of modifications or disapproval. The objective is our prime interest.

H. A. Warner.

EHFA. Received Nov. 12, 1934, Central Files.

[fol. 3312] COMPLAINANTS' EXHIBIT No. 670 (Excluded)

Tennessee Valley Authority

Office Memorandum

To: W. B. Phillips, Chattanooga, Tennessee.

From: J. Van Rogers, Tupelo, Mississippi.

Date: August 16, 1934.

Subject: Travelling Demonstration Kitchen.

Replying to your memorandum of August 12, and your request for information on this subject, dated July 26, I am attaching a list of towns and date set-up for demonstration of this truck, along with comments and reactions of the different county agents with whom I have discussed this matter.

From day to day I will send you additional schedules as they are completed.

COMPLAINANTS' EXHIBIT No. 670 (Excluded)

You will note that I have scheduled September 4 as the opening date, as September 3 is Labor Day and we feel that it would not be a very good day to hold a demonstration.

The locations of cooking schools on the attached list have been obtained without any cost to the TVA.

J. Van Rogers.

JVR/wal.

EHFA. Received Apr. 27, 1935, Central Files.

[fol. 3313] Travelling Demonstration Kitchen, Mississippi Division

Date of Demonstration: September 4-5-6.

Number of Days: 3.

Town: Booneville, Mississippi.

County: Prentiss.

Location of Demonstration: Community House, Seating Capacity 350.

Number of Customers: 316.

Newspapers and Publishing Dates: Banner, Thursday; Independent, Friday.

Dealers: M. A. Brown Plumbing & Electric Supply Co., Booneville Hardware Co., Milton Motor Company, E. M. Hale Company.

County Agent: Clifford G. Wallace, Booneville.

Home Economics Teacher: Mabel Cunningham, Booneville.

Remarks: Telephone Directory is attached.

Misses Lipsey and Cunningham stated that they would give their whole hearted support to the venture.

Booneville is proud of the fact that it is first to receive a visit from the truck. The newspapers wish to give as much publicity as possible as soon as they are given definite dates. They are awaiting your confirmation of the above dates.

Dealers expressed great enthusiasm and are willing to give 100% co-operation.

[fol. 3314] Date of Demonstration: September 7.

Number of Days: 1.

COMPLAINANTS' EXHIBIT No. 670 (Excluded)

Travelling Demonstration Kitchen, Mississippi Division—
Continued

Town: Wheeler, Mississippi.

County: Prentiss.

Location of Demonstration: Wheeler High School Building, Seating Capacity 300.

Number of Customers: 18.

Newspapers and Publishing Dates: Baldwin Home Journal, Thursday.

Dealers: Served by dealers from Baldwin.

County Agent: Clifford G. Wallace, Booneville.

Home Demonstration Agent: Johnnie Lipsey, Booneville.

Home Economics Teacher: None.

Remarks: Miss Lipsey and Mr. Wallace agreed to arrange their schedules so as to be of assistance in this work.

Newspapers and dealers in Baldwin will co-operate to give this community a good coverage and advertisement as possible.

[fol. 3315] Date of Demonstration: September 10-11.

Number of Days: 2.

Town: Baldwin, Mississippi.

County: Lee.

Location of Demonstration: McWorter Building, Seating Capacity 300.

Number of Customers: 140.

Newspapers and Publishing Dates: Baldwin Home Journal, Thursday.

Dealers: Prather Auto Company.

County Agent: W. C. Inzer, Tupelo, Miss.

Home Demonstration Agent: Hallie Prather, Tupelo, Miss.

Home Economics Teacher: None.

Remarks: Prather, of Prather Auto Company was very enthusiastic about project, and will offer any assistance needed.

Miss Prather, Lee County Home Demonstration Agent, and Mr. Inzer agree to co-operate with the venture in the various towns in Lee County.

[fol. 3316] Date of Demonstration: September 12.

Number of Days: 1.

Town: Guntown, Mississippi.

COMPLAINANTS' EXHIBIT No. 670 (Excluded)

Travelling Demonstration Kitchen, Mississippi Division—
Continued

County: Lee.

Location of Demonstration: Luther Waters Store Building, Seating Capacity 100.

Number of Customers: 41.

Newspaper and Publishing Dates: Covered by Baldwyn and Tupelo papers.

Dealers: Served by dealers from Baldwyn and Tupelo.

County Agent: W. C. Inzer, Tupelo, Miss.

Home Demonstration Agent: Hallie Prather, Tupelo, Miss.

Home Economics Teacher: None.

Remarks: County Agents, Miss Prather and Mr. Inzer agree to cooperate with the demonstration at this place.

Dealers and agents in Tupelo and Baldwyn will aid in spreading news of the event.

Telephone Directory attached.

[fol. 3317] COMPLAINANTS' EXHIBIT No. 671 (Excluded)

To avoid repetition this exhibit is not set out herein at length. It is substantially the same as Complainants' Exhibit No. 670.

[fol. 3318] COMPLAINANTS' EXHIBIT No. 672 (Excluded)

Mr. Guy Thaxton, TVA, Tupelo.

W. B. Phillips, Chattanooga.

August 13, 1934.

Itinerary for Traveling Kitchen

We are becoming a little bit anxious about the itinerary for the traveling kitchen. Will you kindly let us know or ask Mr. Rogers to let us know what progress has been made in working out the route for the truck.

The truck is going to be ready to go on the road without fail Monday, September 3. The demonstrator has been employed and all preparations at this end are well in hand. Please let us know what has been accomplished at your end.

W. B. Phillips.

EHFA. Received Aug. 13, 1934, Central Files.

[fol. 3319] COMPLAINANTS' EXHIBIT No. 673 (Excluded)

Mr. Guy Thaxton, Tupelo, Miss.
W. B. Phillips.

July 26, 1934.

Travelling Demonstration Kitchen

I believe it is going to be possible to get the travelling demonstration kitchen on the road in your district during the week beginning August 13.

Attached herewith you will find a tentative itinerary for the work over a two months period which Mr. Osborne has prepared as a result of his discussions with you and Mr. Rogers last week. This itinerary is tentative only and its final form is dependent upon such definite arrangements only *and its final form is dependent upon such definite arrangements* as can be made in each of the towns scheduled. We would very much like to have Mr. Rogers go over this route beginning Monday of next week so that we can be certain by the 13th of a final itinerary for the truck.

You will note that on each weekly schedule, so far as our information allows, we have placed the names of the county agent, the home demonstration agent and the home economist teachers, as well as the names of dealers. We believe it would be well for Mr. Rogers to make initial contacts with each one of these persons to inform them of the visit [fol. 3320] of the truck and to tell them as definitely as he is able, though subject to a possible revision, when the demonstration kitchen will reach the town noted. We will want to engage home economics teachers and county and home demonstration agents very fully in this work. Miss Davison will follow up Mr. Rogers' initial visits to these people with personal letters.

We would like a report from Mr. Rogers on this itinerary with some definite comment as to locations for displaying the kitchen and as to cooperation from dealers and others, in our hands not later than August 8, as we will need a few days before the truck goes on the road to send out our advance information to consumers.

While our consumer list for your territory is fairly complete, we think it would be advisable to have in addition the telephone directory for each town on the route of the demonstration. If Mr. Rogers will secure these direc-

COMPLAINANTS' EXHIBIT No. 673 (Excluded)

tories as he goes along and forward them to us with his report, they will prove helpful in circularizing advance material.

A sufficient length of time before the arrival of the truck in each town on the route, we will see that local newspapers in the neighborhood are supplied with stories and photographs. We will also see that dealers in each of the towns are supplied with window cards and other material announcing the day and location in the town of the kitchen. The posters and window cards will have a blank space which [fol. 3321] can be filled in showing the location of the kitchen and the time the demonstration will be held in each town. Mr. Rogers' report should allow us to schedule this material accurately.

Mr. Thaxton, W. B. Phillips, July 26, 1934

Travelling Demonstration Kitchen—2

In speaking to dealers of the visit of the kitchen to their towns Mr. Rogers should be careful not to present the idea as a definite tie-in on the part of EHFA, for sales. The demonstrator will keep records of attendance on individual registration cards which will be forwarded to the division office after each demonstration for follow-up by Electric Home Representatives. The kitchen will carry an L. & H. Range, Cleveland water heater, and Kelvinator chest-type and Frigidaire front-opening refrigerators. It will be obviously impossible to tie-in all manufacturers and dealers by products. But all dealers should be encouraged to work with the kitchen and should be assured that demonstrations will be carried out with impartiality and in a strict spirit of fairness.

The itinerary which accompanies this memorandum is dependent upon available facilities for display as uncovered by Mr. Rogers. He should make his report to us complete enough for the itinerary to be drawn up in definite and final [fol. 3322] form before the truck starts on the road.

The project is so drawn as to allow a small sum of money for rentals on empty store buildings, et cetera, although we would of course prefer to hold the demonstrations in schools or other public places. Where schools and other places of the sort are not available, Mr. Rogers should make

COMPLAINANTS' EXHIBIT No. 673 (Excluded)

arrangements for renting suitable space. Where we have to rent space, we would like to get by for as little as possible and without formal agreements. The demonstrator will settle for the amount at the time the kitchen visits the town. She will also settle for the local labor which the project allows the truck driver as assistance in putting up the kitchen. Rentals should average not more than \$5.00 a stand. Dealers should be helpful in finding free space, although dealers' stores, I think you will agree with me, are unsuitable as locations for demonstrations of this type.

Mr. Osborne tells me that you will want your own men to make the electrical connections for the demonstration in each town along the route. I think this is a good idea, but to be sure that the appliances will work properly, we are going to send Mr. Pierson along with the demonstration for the first week; he will be able to make all necessary adjustments and to instruct the truck driver in care of the appliances.

The itinerary attached does not show the actual dates [fol. 3323] when the demonstration will be held in each town. Mr. Rogers' report should supply this information. We ought also to have the addresses of the locations he will arrange for in each town along the route.

Mr. Guy Thaxton, W. B. Phillips, July 26, 1934

Travelling Demonstration Kitchen—3

It is a rather large order to cover the entire ground in the short time remaining before the 8th. If Mr. Rogers can give us a definite schedule for the first two weeks, it will be sufficient; subsequently he can complete the itinerary over the two months period.

W. B. Phillips.

• WBP:ikm.

EHFA. Received Jul. 27, 1934, Central Files.

[fol. 3324] COMPLAINANTS' EXHIBIT No. 674 (Excluded)

(Omitted)

[fol. 3325] COMPLAINANTS' EXHIBIT No. 675 (Excluded)

Mr. George W. Kable.
G. D. Munger.

October 30, 1934.

Your memo 10/25 to Mr. H. J. C. Pearson.

Your memorandum of October 25, addressed to Mr. Pearson relative to approval of equipment, has been received and Mr. Pearson has asked me to answer certain questions in it.

The news release which you saw relative to financing other than TVA models was approximately as follows: In territory served by TVA power EHFA will finance all domestic models of a manufacturer having a TVA model in his line. You will see that this confines this particular feature to the Mississippi territory at the present time and will be extended to northern Alabama and Knoxville when the transfer is made to TVA of those properties. This policy is flexible and can be changed should it prove to be desirable, for example, while it will apply to ranges, refrigerators, and water heaters it might not apply on some future appliances if the risk involved would not justify it.

In requesting the Industry Division to test pumps for approval by TVA we had in mind to see that they measured [fol. 3326] up to our specifications and that their performance would justify their inclusion in our program. In other words, this testing would be very similar to that which was carried out on water heaters. I believe that we should be constantly seeking ways to lower the cost of high-quality appliances. However, our specifications should be so written that a consumer buying too small a pump for the job it has to do would not place the blame on TVA because it had approved the appliance. If there is any way in which your division can cooperate with us in this matter we would appreciate it.

For your information you will be interested to know that I am today advising the pump manufacturers that we are rejecting their proposals and inviting them to submit new proposals either on the same equipment at a lower price or on new equipment. In view of the contribution which TVA is willing to make towards the popularizing of electric pumps in securing low energy cost and low finance cost it

COMPLAINANTS' EXHIBIT No. 675 (Excluded)

seems to me that the pump manufacturers should be willing to contribute something in the line of price reductions.

G. D. Munger.

EHFA. Received Oct. 31, 1934, Central Files.

[fol. 3327] COMPLAINANTS' EXHIBIT No. 676 (Excluded)

Tennessee Valley Authority

Office Memorandum

To: Mr. H. J. C. Pearson, EHFA, Chattanooga, Tennessee.

From: George W. Kable.

Date: October 25, 1934.

Subject: EHFA Approval of Equipment Other Than TVA Models.

A week or more ago I saw a brief news release to the effect that a company had submitted and received approval of a TVA model refrigerator, and that EHFA financing was to be extended to other models of refrigerators made by the same company.

A representative of the Dayton Pump Company was in the office today and wished to know whether this policy would extend to pumps, and if so to what extent it would apply.

This brings up another point on which I think it would be well for us to have some discussion. It is obvious that our specifications cannot cover all types and sizes of water systems which might be desirable for use in this area. I have in mind particularly some of the lower cost pumps which are being placed on the market just now in order to increase the sales of equipment during this period of low income. This includes shorter stroke, higher speed, deep well pumps of lighter construction that we have specified, [fol. 3328] and designed for use on wells where the water level is only 20' to 50' deep, below the section lift of a shallow well pump. There is also the possibility for a considerable demand for the lower cost shallow well pumps of the fresh water type, particularly in suburban communities where the demand for water is relatively low.

COMPLAINANTS' EXHIBIT No. 676 (Excluded)

Some of the companies are interested in pushing these pumps at present, and there is a question whether we should draw up additional specifications to include these in the near future or whether the Industry Division might investigate this equipment from the standpoint of research on lower cost pumps. Our attitude in regard to this problem will be dependent on whether our division is to function merely as a testing agency for determining whether pumps submitted measure up to our specifications, or whether we are to cooperate with EHFA in the future in deciding upon what equipment shall be accepted for EHFA financing.

George W. Kable.

GWK/aw.

EHFA. Received Oct. 31, 1934, Central Files.

[fol. 3329] COMPLAINANTS' EXHIBIT No. 677 (Excluded)

Mr. A. J. Robertson, General Accountant, TVA, Knoxville.
William A. Weaver, Assistant Treasurer, EHFA, Chattanooga.

May 1, 1935.

Contract No. TVHu-8

At the present time there is a contract existing between the Tennessee Valley Authority and the Electric Home and Farm Authority, which contract is numbered TVHu-8 and is dated the first day of July, 1934.

This contract has designated the Tennessee Valley Authority to receive, as agent for Electric Home and Farm Authority, customer paper received from retailers for the sale of approved appliances.

Since April 5 you have been receiving and purchasing for our account paper on appliances other than the so called approved appliances referred to above.

Submitted to you herewith is an amendment to contract TVHu-8, this amendment being known as TVHu-8A. This amendment is being submitted to you in triplicate. Will you please have these copies signed by the individuals who [fol. 3330] signed the original contract, and return them

COMPLAINANTS' EXHIBIT No. 677- (Excluded)

to us. At that time we shall complete the contract by having the proper authorities sign same, and shall return a copy to you for your file.

William A. Weaver.

WAW:fp
Enclosure

EHFA. Received Jun. 12, 1935, Central Files.

[fol. 3331] COMPLAINANTS' EXHIBIT No. 678 (Excluded)

F. F. Beauchamp, Wilson Dam; E. W. Baughman, P. O. Box 110, Athens.

G. D. Munger.

August 28, 1934.

This is to advise that the finance plan which is effective in Tupelo can be applied to Athens immediately. In other words sales of large models of ranges, water heaters and refrigerators may be financed by the Authority if the manufacturer has an approved model in his line. This is to be effective immediately.

G. D. Munger.

cc—Mr. A. H. Sullivan.

EHFA. Received Aug. 29, 1934, Central Files.

[fol. 3332] COMPLAINANTS' EXHIBIT No. 679 (Excluded)

Mr. F. J. Carr.

Mr. G. D. Munger.

Mr. W. A. Weaver.

Mr. H. J. C. Pearson.

August 29, 1934.

New Policy

Effective immediately, in the territory described below, the Electric Home and Farm Authority is extending its

COMPLAINANTS' EXHIBIT No. 679 (Excluded)

financing facilities to include models of electric appliances other than those actually bearing the TVA emblem of approval.

This additional financing service is available on domestic electric ranges, refrigerators, and water heaters where the manufacturer has an approval on one model of the range or refrigerator or water heater being sold. As an example, the Malleable Iron Range Company have an EHFA approval on their Monarch model 15-G domestic range. Up to the present time the model 15-G is the only model in their line of ranges that has been eligible for EHFA financing. Under the new policy all domestic electric ranges manufactured by the Malleable Iron Range Company are eligible for EHFA financing. However, commercial and industrial appliances or equipment are not included in this additional financing service; nor does this mean that the TVA emblem can be carried on any model other than the approved model. [fol. 3333]. The territory in which this additional financing service is available is the territory which is supplied with electricity by the Tennessee Valley Authority. The enclosed map and list of cities and communities will indicate that this territory is at present confined to the northeastern area of Mississippi and the City of Athens, Alabama. However, it is expected that the designated area in northwestern Alabama and northeastern Tennessee will be eligible for the additional financing service as soon as negotiations now being conducted are completed.

A copy of this letter and enclosure is being sent to all manufacturers having an EHFA approval in their line, and to all dealers in the northeastern Mississippi territory and Athens, Alabama, which is the territory effected immediately

Very truly yours, Electric Home and Farm Authority, Inc., by G. D. Munger, Commercial Manager.

Enclosures

EHFA. Received Sep. 4, 1934, Central Files.

(Here follow two photolithographs, side folios 3334-3335)

COMPLAINANTS' EXHIBIT No. 680 (Excluded)

The G.D. Munger

ELECTRIC HOME AND FARM AUTHORITY, INC.
AN AGENCY OF THE TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE

April 3, 1935

DAVID E. LILIENTHAL, PRESIDENT
ARTHUR E. MORGAN, VICE PRESIDENT
HARCOURT A. MORGAN, SECRETARY
FRANK J. CARR, TREASURER
WILLIAM A. SUTHERLAND, COUNSEL
GEORGE D. MUNGER, COMMERCIAL MANAGER

To All Cooperating Utilities, Dealers, Distributors, and Manufacturers:

Effective April 5, 1935, Electric Home and Farm Authority will extend its financing facilities to include the complete line of appliances rather than approved models only. This means that if there is an approved model in the line, EHFA will finance the other models at the standard EHFA financing terms that have heretofore been applicable to approved models only.

In order to preclude the possibility of misunderstanding or confusion, the following is an example of the correct interpretation of this new policy:

Assume Blank Company has received an EHFA approval on its small model refrigerator, which up to this time is the only model that could be financed through EHFA. Under the new policy of financing the complete line, which is effective April 5, EHFA will finance the other models of domestic refrigerators that are manufactured by Blank Company. This same policy of course applies to electric ranges, water heaters, and deep and shallow well pumps.

The territory in which this service will be available is restricted to the area in which EHFA is operating at the present time and is described in detail on the attached sheet.

Very truly yours,

To All Cooperating Utilities, Dealers, Distributors, and Manufacturers:

Effective April 5, 1935, Electric Home and Farm Authority will extend its financing facilities to include the complete line of appliances rather than approved models only. This means that if there is an approved model in the line, EHFA will finance the other models at the standard EHFA financing terms that have heretofore been applicable to approved models only.

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Very truly yours,

ELECTRIC HOME AND FARM AUTHORITY

By

G. D. Munger
Commercial Manager

Enclosure

E. H. F. A.
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ELECTRIC HOME AND FARM AUTHORITY, INC.

AN AGENCY OF THE TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE

April 5, 1935

DAVID E. LILIENTHAL, PRESIDENT
ARTHUR E. MORGAN, VICE PRESIDENT
HARCOURT A. MORGAN, SECRETARY
FRANK J. CARR, TREASURER
WILLIAM A. SUTHERLAND, COUNSEL
GEORGE D. MUNGER, COMMERCIAL MANAGER

TERRITORY IN WHICH EHFA FINANCING FACILITIES ARE AVAILABLE

Following are the areas in which the financing facilities of Electric Home and Farm Authority are available. In accordance with a recently adopted policy, EHFA will not only finance approved models but will also finance the other domestic models where there is an approved model in the line. This plan will be in effect throughout the entire EHFA territory beginning April 5, 1935.

1. That part of Tennessee which is served with electricity by the Tennessee Electric Power Company and subsidiaries, the Toccoa Electric Power Company of Blue Ridge, Georgia, and the South Kentucky Power Company of Alexandria, Tennessee.
2. That part of Georgia which is served with electricity by the Georgia Power Company.

3. The following individual communities:

Municipally Owned Systems

Cookeville, Tennessee

Dayton, Tennessee

Lebanon, Tennessee

Pulaski, Tennessee

Barnesville, Georgia

Cartersville, Georgia

Athens, Alabama

Amory, Mississippi

Tupelo, Mississippi

New Albany, Mississippi

Privately Owned Systems

Alcoa, Tennessee

Etowah, Tennessee

Franklin, Tennessee

County Power Associations

Alcorn County, Mississippi

Pontotoc County, Mississippi

4. The Counties of Benton, Tippah, Tishomingo, Prentiss, Lee, Itawamba, Union, and the northern half of Monroe. These counties are all located in northeast Mississippi.

5. Rural lines in western half of Mississippi.

TERRITORY IN WHICH EHFA FINANCING FACILITIES ARE AVAILABLE

Following are the areas in which the financing facilities of Electric Home and Farm Authority are available. In accordance with a recently adopted policy, EHFA will not only finance approved models but will also finance the other domestic models where there is an approved model in the line. This plan will be in effect throughout the entire EHFA territory beginning April 5, 1935.

1. That part of Tennessee which is served with electricity by the Tennessee Electric Power Company and subsidiaries, the Toccoa Electric Power Company of Blue Ridge, Georgia, and the South Kentucky Power Company of Alexandria, Tennessee.
2. That part of Georgia which is served with electricity by the Georgia Power Company.

3. The following individual communities:

Municipally Owned Systems

Cookeville, Tennessee

Dayton, Tennessee

Lebanon, Tennessee

Pulaski, Tennessee

Barnesville, Georgia

Cartersville, Georgia

Athens, Alabama

Amory, Mississippi

Tupelo, Mississippi

New Albany, Mississippi

Privately Owned Systems

Alcoa, Tennessee

Etowah, Tennessee

Franklin, Tennessee

County Power Associations

Alcorn County, Mississippi

Pontotoc County, Mississippi

4. The Counties of Benton, Tippah, Tishomingo, Prentiss, Lee, Itawamba, Union, and the northern half of Monroe. These counties are all located in northeast Mississippi.
5. Rural lines in western half of Lauderdale County, Alabama.
Rural lines in eastern half of Colbert County, Alabama.
6. Norris Dam) Employees of TVA residing in these locations may finance
Wheeler Dam) the purchase of appliances through EHFA over a maximum
Wilson Dam) period of two years. This limitation to two years is due
to the temporary nature of the work being done by a large
portion of the employees in these areas.



[fol. 3336] COMPLAINANTS' EXHIBIT No. 681 (Excluded)

Electric Home and Farm Authority,
Chattanooga, Tennessee

Press Release—for Release at Will

May 22, 1934.

The electric home equipment program of Electric Home and Farm Authority will open May 22, David E. Lilienthal President of EHFA, announced today.

Sales of electric ranges, refrigerators and water heaters carrying the Authority's emblem will begin in all areas served directly by Tennessee Valley Authority power and in the territories served by Commonwealth and Southern Electric utilities in Tennessee, Alabama, and Georgia.

Sale of the emblem appliances on time-payment purchases will be financed by Electric Home and Farm Authority throughout the area affected.

A low finance charge will be made on purchases under the time-payment plan. A single appliance may be financed over a period of three years or less. Purchases of two or more appliances will be financed over a period of four years or less. Down payment and monthly payment on a single purchase will be less than \$2.00.

Participation in the plan, Mr. Lilienthal said, is open to all retailers who are approved by the manufacturers of emblem appliances. The retailers wishing to participate will *make appliances*. *The retailers wishing to participate will* make application to the manufacturer for sale of the financed appliance. On notice from the manufacturer, EHFA will notify the dealer of his approval as a licensed retailer to sell EHFA financed appliances.

All forms and financed charts will be supplied the retailers and utilities by EHFA at no cost.

Once the sale of an emblem appliance is made, Mr. Lilienthal said, the retailer delivers the purchaser's contract to the utility serving the purchaser and the utility pays the retailer the cash-sale price of the appliance less the down payment.

Electric Home and Farm Authority

Press Release—for Release at Will

A finance chart will be given to dealers on which they will determine amount of down payment and monthly install-

COMPLAINANTS' EXHIBIT No. 681 (Excluded)

ment. The utility serving the purchaser will make collection of the monthly installment at the same time the electric [fol. 3337] bill is collected.

Mr. Lilienthal stated that all licensed dealers will be treated alike and that individual makes of EHFA-financed appliances, which will be designated by the presence of the Authority's emblem, will be sold at the same price by all retailers, including merchandising departments of utilities.

The area in which sale of emblem appliances will begin includes virtually all of the state of Georgia, a large part of Alabama, not including Birmingham, and the middle and a part of the eastern section of Tennessee, and including the cities of Nashville and Chattanooga. Sales in the TVA Power area will begin at Tupelo, Mississippi, first municipality to contract for TVA power.

Sales in territory served by other utilities and municipal plants in the Valley states will be authorized upon application of those utilities and adjustment of their rates.

Mr. Lilienthal said that a pamphlet giving a detailed explanation of the retailer's participation in the program is now being printed. This pamphlet, he said, will be given wide distribution in the areas where initial sales operations begin.

[fol. 3338] COMPLAINANTS' EXHIBIT No. 682 (Excluded)

List of Dealers as of June 30, 1937, from Whom Electric Home and Farm Authority Has Purchased Conditional Sale Contracts on Which the Tennessee Valley Authority Was Collecting Monthly Installments for the Account of Electric Home and Farm Authority.

Location	Number of Dealers
Florence, Alabama	8
Hartselle, Alabama	3
Decatur, Alabama	3
Athens, Alabama	2
Corinth, Mississippi	4
Iuka, Mississippi	2
Harriman, Tennessee	1
Pulaski, Tennessee	1
Fayetteville, Tennessee	5

COMPLAINANTS' EXHIBIT No. 682 (Excluded)

Location	Number of Dealers
Henderson, Tennessee	1
Ardmore, Tennessee	1
Sheffield, Alabama	2
Shelbyville, Tennessee	1
Town Creek, Alabama	1
Clinton, Tennessee	1
Huntsville, Alabama	1
Moulton, Alabama	2
Leighton, Alabama	1
Tuscumbia, Alabama	2

[fol. 3339] COMPLAINANTS' EXHIBIT No. 683 (Excluded)

Release by Rural Electrification Administration
(Omitted)

[fol. 3340] COMPLAINANTS' EXHIBIT No. 684 (Excluded).

Cooperative Extension Work in Agriculture and Home
Economics State of Georgia

Athens

July 2, 1935.

Ga. . 7 . Catoosa

Mr. George W. Kable, % M. O. Swanson, Rural Electrification Administrator, 2000 Massachusetts Avenue, Washington, D. C.

DEAR MR. KABLE:

There have just come to my desk a petition signed by 297 farmers of a community in Catoosa County, Georgia, a map of the county showing the proposed rural electrification lines, a list of the names of the farmers who signed the petition, and a letter relative to this proposed project from county agent J. P. Nicholson. A copy of Mr. Nicholson's letter and the other material he sent me are enclosed herewith.

COMPLAINANTS' EXHIBIT No. 684 (Excluded)

At the suggestion of Mr. J. G. Woodruff, Assistant District Agent, who is supervisor of the farm management program looking particularly toward prevention of soil erosion in the Georgia counties that lie in the Tennessee Valley area, I am sending these things to you. Mr. Woodruff tells me that he talked to you about the matter while in Knoxville some days ago. I shall greatly appreciate your presenting the matter as a request from the farmers concerned to Mr. Cook who is in charge of the rural electrification national program.

[fol. 3341] It seems unnecessary for me to say that these farmers are interested in getting electric service. I am approving and passing on their request in the hope that it will be handled as rapidly as possible to the end that this project be gotten underway in accordance with whatever regulations the different agencies concerned may have prescribed. Your assistance in the matter will be greatly appreciated.

Very truly yours, (S.) Harry L. Brown, Director.

enclosures.

[fol. 3342] COMPLAINANTS' EXHIBIT No. 685 (Excluded)

Rural Electrification Administration, Washington, D. C.

GENTLEMEN:

We are submitting herewith two copies of a report regarding a rural electrification project of the North Georgia Electric Membership Corporation. This report was prepared by the Tennessee Valley Authority as a part of its rural electrification activities, and they have very kindly furnished us with copies and consented to our use of them for this purpose.

At this time we should like to make an informal application for the necessary funds for constructing a rural electric distribution system throughout the North Georgia area, as covered by this report. The total estimated cost for constructing such a system is approximately \$298,000. This amount covers the construction of approximately 300 miles of rural lines, both single-phase and three-phase, together with necessary transformers, protective equipment, meters,

COMPLAINANTS' EXHIBIT No. 685 (Excluded)

services, secondaries, and other appurtenances necessary to complete this project. The information embodied in this report is based on the results of a commercial and field survey conducted in March, 1936. The area covered by this survey includes Catoosa, Whitfield, Walker, Chattooga, Gordon, Murray and Dade Counties.

[fol. 3343] The total estimated revenue derived from this proposed system will be approximately \$55,000 for the first year's operation, showing an initial ratio of 5.4 to 1, and an annual kilowatt-hours consumption of 1,862,000. According to the income and expense statement which forms a part of the report, the net income before depreciation on the basis of estimated first year revenues is \$1,439; on the basis of second year revenues, \$7,527; and on the basis of estimated third year revenues, \$11,814, in all cases after the payment of interest at 3%. In addition, there will be available for amortization in these years amortization collection of \$11,955, \$14,510, and \$16,945, respectively. On the basis of first year estimates, the loan will be repaid in twenty-five years, on the basis of second year estimates, in twenty-two years and on the third year basis, in twenty years.

In compiling the income and expense statement, as well as in computing the construction cost, Catoosa County and Dade County have been excluded because the Catoosa project is now under construction and is being financed by the Tennessee Valley Authority, and Dade County, because, in our opinion, it shows an inadequate number of customers to justify the construction of any rural lines at this time.

On April 6, 1936, a tentative plan or organization was worked out for the North Georgia Electric Membership Corporation, and subsequently on April 8, a petition for charter for this organization was filed under the Georgia laws. [fol. 3344] A copy of the petition is attached hereto. In accordance with the laws of the State of Georgia, this charter will be granted on or about May 8, 1936.

Therefore, it is our desire at this time to make every effort to obtain all necessary instructions pertaining to the requirements for completing such a loan in order that a contract may be executed at the earliest possible date after the charter has been granted, thereby enabling our organization

COMPLAINANTS' EXHIBIT No. 685 (Excluded)

to start actual construction of this project immediately. We think that the situation is especially urgent inasmuch as a local power company is attempting to secure enough signatures to warrant the construction of rural lines which will take the cream of our territory and perhaps defeat the whole project, and any substantial delay might alienate enough of our supporters to make such "spite line" construction feasible.

We shall greatly appreciate your prompt reply regarding this subject.

Yours very truly, North Georgia Electric Membership Corporation, by R. C. Pittman, Chairman of the Board.

[fol. 3345]

Introduction

This report and the accompanying data is the result of a survey recently completed in North Georgia under the TVA "Neighborhood Plan". The survey was started in January, 1936, under the leadership of the several county agents representing their respective county, including the following:

Catoosa County
Whitfield County
Murray County
Walker County
Chattooga County
Gordon County
Dade County

This survey was completed in March 1936, and at which time all customer applications, together with maps and [fol. 3346] other information, was submitted to the TVA, Chattanooga, Tennessee, for study and to determine the economic soundness and feasibility as viewed from a financial and operating standpoint.

This proposal includes the construction of approximately 300 miles of rural electric lines consisting of 6,900 volt single phase and 11,000 volt 3 phase together with all necessary transformers, meters, services, secondary lines, etc., in accordance approximately with the routes and locations as shown by the accompanying map, at an estimated cost of approximately \$298,000.00.

COMPLAINANTS' EXHIBIT No. 685 (Excluded)

The system would serve approximately 2,000 domestic, commercial and industrial rural customers, using initially approximately 1,852,000 KWH. annually, with an estimated annual gross revenue of \$55,000.00.

The area proposed to be developed under this program embraces something like 2,115 square miles, most of which is fertile soil and highly adaptable to diversified agriculture. A total of approximately 12,000 farms with a rural population of approximately 101,000, now without electric service in this area may be served by carrying out such a program and it is conservatively estimated that at least 3,000 rural customers will be receiving electric service from this system within 24 months after completion of the lines. The progressiveness and a desire for better living conditions in this area manifested by the rural people is strikingly noticeable.

[fol. 3347] The principal revenue producing items ranking in the order named are:

Cotton

Dairy products

Peaches and apples

also a rural home enterprise is gaining wide spread recognition through the handicraft work of weaving, and knitting of hook rugs, bed spreads, and other similar articles.

In addition to the agricultural activity, this section has an unusual large number of both large and small industrial plants to whom the rural people may turn for employment during the periods when not engaged in their agricultural activities. Being close to the industrial center of Chattanooga, Dalton, and Calhoun makes it very probable that country homes will be built by a number of the people employed in the large plants. Especially is this true in Walker, Catoosa, Murray, and Whitfield Counties. In Murray County there is under way a Federal Project of building a large lake in the Cherokee National Park and long time leases are being granted in this park to persons wishing to build cabins and homes. The average income per capita in these counties is considerably higher than the average in the south, due to two factors—farm ownership combined with modern and progressive farming, and the location of

COMPLAINANTS' EXHIBIT No. 685 (Excluded)

1
industrial plants in the area that helps to supplement the farm income.

This section indicates a large percentage of farm owners [fol. 3348] and operators when compared with the general conditions found in the South. Thus a higher income is enjoyed and subsequently a higher standard of living brought about, electrified and modernized homes and farms will be inevitable.

The proposed operating headquarters for the system will be located in Dalton, Georgia, this is the largest town in the area as well as being the geographic center. The TVA's point of delivery for service to the system will be at a point on the north central Catoosa County line which also is the Tennessee-Georgia state line. The source of supply will be through an interchange between the TVA and the Tennessee Electric Power Company at Ooltewah, Tennessee, located approximately six miles northeast of the described delivery point. This particular section of the line (approximately 6 miles) together with the necessary substation facilities and equipment is being installed by the TVA. This interchange agreement will remain in force until the TVA has completed the construction of its transmission and substation facilities at Chickamauga Dam, at which time the North Georgia proposed system would be served direct from this location.

Particular attention is called to the unusual size of this proposed system which offers a decided advantage from the standpoint of efficient and economical operation—with larger operating units, as this would be, it enables the operators to employ a well trained and efficient operating personnel, to make material and equipment purchases in quantity lots, to economize to the fullest extent through system diversity, [fol. 3349] and the wholesale purchase of energy in large blocks, thereby realizing the greatest benefits, from the low brackets of the wholesale rates.

The appendix to follow embodies the principal figures and factors for further study of the proposed project.

(Appendix omitted.)

[fol. 3350] COMPLAINANTS' EXHIBIT No. 686 (Excluded)

Message by Hill McAlister, Governor of the State of Tennessee, to the General Assembly of Said State on January 22, 1935.

[fol. 3351] To the Honorable Senate and House of Representatives of the Sixty-Ninth General Assembly:

By House Joint Resolution No. 38 passed at the regular session of the Tennessee General Assembly in 1933, I was authorized and directed to appoint a committee of six outstanding citizens, two from each grand division of the State, to be designated as the "Tennessee Valley Commission." The duties of this body are specified in said resolution, and, in brief, authorize them to represent the State of Tennessee in matters pertaining to the development of Muscle Shoals and the Tennessee Valley and to cooperate with the Federal Government in such matters, and to study the benefits that may be derived by Tennessee from such development, and to make a comprehensive survey of the possibility of obtaining cheaper power or electric rates for the citizens of Tennessee and to report to the Governor and legislature all necessary legislation needed to protect the interest of the people of this State.

In conformity with the direction contained in said joint resolution, I appointed the following citizens as the members of the said commission. From East Tennessee Hon. D. C. Webb of Knox County and Hon. John A. Chambliss of Hamilton County. From Middle Tennessee Hon. A. J. Dyer of Davidson County and Hon. W. R. Rackley of Giles County. From West Tennessee Hon. C. E. Pigford of Madison County and Hon. Wm. W. Goodman of Shelby County.

These gentlemen promptly undertook the duties specified and met within the Tennessee Valley Authority Commissioners in their offices in Knoxville early in April 1934. At this meeting, at which I had the honor to be present, the ways in which this commission so appointed by me could be helpful to the Tennessee Valley Authority were discussed at length. It was then pointed out by the Tennessee Valley Authority Commissioners that the Federal Government was deeply interested in the creation of planning [fol. 3352] boards within the various states, and that it would be helpful if I, as Governor, would create such a board in Tennessee to work in connection with the Ten-

COMPLAINANTS' EXHIBIT No. 686 (Excluded)

nessee Valley Authority, and, likewise, with the Federal Planning Board already created by President Roosevelt. I accordingly designated the six members of the Tennessee Valley Commission, appointed by me as aforesaid, as the Tennessee Planning Board, and they have been functioning also in that capacity ever since. They have been in constant touch not only with the Tennessee Valley Authority but also with Federal Planning Board authorities and with the office of the Secretary of the Interior, from each of which organizations they have received suggestion and recommendations for the enactment of laws in Tennessee that would serve the purposes that the Federal Government now has in view in the various states of the Union in carrying out the national recovery program.

In conformity with the requirement of said House Joint Resolution No. 38 the said commission so appointed by me has reported as follows:

"In accordance with joint resolution thirty-eight (38) of the General Assembly of the State of Tennessee of 1933, creating the Tennessee Valley Commission, we have formulated a legislative program to operate with the Tennessee Valley Authority, and we do hereby report that the enclosed bills are recommended by us for passage.

"All of these bills have been approved by the Tennessee Valley Authority, and the Tennessee Valley Authority feels that the passage of all these bills will materially expedite the extension of the planning electric, navigation, housing and other phases of the Tennessee Valley Authority's program within the State of Tennessee.

"In addition, Bill No. 12, relating to the creating of Housing Authorities, has been approved by the National Association of Housing Officials, on behalf of the Federal Emergency Administration of Public Works.

"Since some of the counties or municipalities of the State may wish to use Federal funds to enable them to operate under the Municipal Electric Plant Act, being known as Our Bill No. 7, we have deemed it desirable to secure the Public Works Administration's approval of the form and substance of this bill. We have been notified that the Public Works Administration does approve same.

COMPLAINANTS' EXHIBIT No. 686 (Excluded)

"It is not unlikely that additional supplemental legislation will be recommended by us for passage, before the end of the present session of the legislature, to cooperate further with the Tennessee Valley Authority. We deem the enclosed bills so important, however, that we are now forwarding them to you, in the hope that all of said bills can be passed at an early date, pending the formulation of supplemental bills."

The bills referred to in this report may be briefly described as follows:

(1) A bill that will authorize the various counties, incorporated cities and towns of Tennessee to construct, purchase or otherwise acquire and operate electric generating, or distribution systems, and to enable such counties, incorporated cities and towns to utilize the surplus power generated by the Tennessee Valley Authority dams.

(2) An Act to authorize municipal corporations, counties, towns and cities owning and operating electric generating transmission or distribution systems, to stipulate in any contract they may desire to make with the Tennessee Valley Authority, or other similar governmental agency, such covenants, terms and conditions as the governing power of such municipal corporations, counties, towns and cities may deem appropriate.

(3) An Act to authorize the Highway Department of Tennessee to purchase or construct and operate landing and loading facilities on the navigable waters of the State, in connection with State Highway facilities parallel to and intersecting such navigable waters.

(4) An Act to define the jurisdiction of the Railroad and Public Utilities Commission so as to exempt therefrom certain Federal and State corporations, agencies, instrumentalities and other public bodies and certain non-profit organizations defined as non-utilities and also to authorize utilities to sell or otherwise dispose of their property to non-utilities.

(5) An Act regulating appeals or reviews of the judgments of the Railroad and Public Utilities Commission.

COMPLAINANTS' EXHIBIT No. 686 (Excluded)

(6) A bill to provide for the creation and establishment of a State Planning Commission for the State of Tennessee.

(7) A bill to provide for the regulation of and for the approval by regional planning commissions before filing for record of plots of the sub-division of land outside the boundaries of municipal corporations.

(8) To empower county courts to provide for the establishment of districts or zones within portions of counties which lie outside of municipal corporations, and to empower County Courts to regulate within such zones the location, height and size of buildings and structures, etc.

(9) An Act to empower municipalities to provide for the establishment of municipal planning commissions.

(10) A bill to empower municipalities to provide for the establishment of districts or zones within the corporate limits for the purpose of regulating within such districts, the location, height, and size of buildings, etc.

[fol. 3354] (11) A bill to provide for the regulation and approval by municipal planning commissions before filing for record of plots of the sub-division of lands lying within such municipalities.

(12) A bill to promote the public health, safety, morals and general welfare by providing for the establishment of housing authorities designed to eliminate unsanitary and dangerous housing conditions by providing for the construction, operation, supervision or safe and sanitary dwellings.

The bills referred to in this report, as indicated therein, were carefully prepared under the direction of the Tennessee Planning Board with the aid of counsel designated and recommended by the Secretary of the Interior, and they follow, as I am informed, the lines that are desired by the Secretary of the Interior, through whose office must pass the various requests that may be made of the Federal Government for the financial assistance that will doubtless be necessary in many instances to enable Tennessee counties, cities and towns to obtain the full benefit of what is being done at this time by the Tennessee Valley Authority. The

COMPLAINANTS' EXHIBIT No. 686 (Excluded)

first five of these acts deal primarily with conditions affecting immediately the work of the Tennessee Valley Authority and the others are enabling acts designed to give the State its counties and cities and towns the benefit of the planning Board activities of the National Government both through the work of the Tennessee Valley Authority as well as in other ways. I have recently received letters from the Hon. Harold L. Ickes, Secretary of the Interior, in which he recommends the enactment of these bills into law, and requests that copies of them, when so enacted, be promptly furnished his office.

It is unnecessary for me to emphasize at this time the importance of thorough cooperation between the State of Tennessee and its various counties, cities and towns on the one hand, and the Tennessee Valley Authority on the other. The Tennessee Valley Authority was created by act of Congress in May 1933 and has been functioning in our State for more than a year and a half. The time of actual [fol. 3355] realization of the tremendous benefits expected to be derived from the expenditure in Tennessee of the great sums that have been made available by Congress for the work of this authority, is rapidly approaching. The bills that I have referred to above have been drawn to give this cooperation. They were introduced in both of your honorable bodies on last Friday, and I am taking this opportunity of especially directing your attention to them and of recommending their prompt enactment.

Respectfully,

Hill McAlister, Governor.

[fol. 3356] COMPLAINANTS' EXHIBIT No. 687 (Excluded)

Message by Hill McAlister, Governor of the State of Tennessee, to the General Assembly of Said State on April 8, 1935

[fol. 3357] To the Honorable Senate and House of Representatives of the Sixty-Ninth General Assembly:

GENTLEMEN:

I have received from the Honorable Harold L. Ickes, National Public Works Administrator, a series of fourteen

COMPLAINANTS' EXHIBIT No. 687 (Excluded)

(14) bills which he requests that I lay before your honorable bodies for enactment into laws. These bills are intended to aid the National Public Works Administration in the expenditure in our State of the large sum of money that it is expected will be allocated to Tennessee from the Public Works bill finally enacted by Congress a few days ago, and which now awaits the signature of the President.

These Acts are described in the letter of Secretary Ickes to me as follows:

(1) "An Act entitled, 'An Act authorizing incorporated cities and incorporated towns to construct, acquire, improve, extend, operate and maintain public works, undertakings and projects; prescribing mode of procedure for and regulating the issuance and sale of bonds and other obligations to finance such works, undertakings and projects, providing for the payment of such bonds and other obligations; and authorizing agreements with the holders of such bonds and other obligations.'

(2) "An Act entitled, 'An Act authorizing counties to construct, acquire, improve, extend, operate and maintain public works, undertakings and projects; prescribing the mode of procedure for and regulating the issuance and sale of bonds and other obligations to finance such works, undertakings, and projects, providing for the payment of such bonds and other obligations; and authorizing agreements with the holders of such bonds and other obligations.'

(3) "An Act, entitled, 'An Act providing for the acquisition, purchase, construction, reconstruction, improvement, betterment, extension, operation, and maintenance of revenue producing public works by any incorporated city or town; authorizing and regulating the issuance of revenue bonds for financing such public works; and providing for the payment of such bonds and the rights of holders thereof.'

(4) "An Act entitled, 'An Act simplifying the procedure for the construction and financing of public works projects by municipalities, enabling municipalities to make and perform contracts with federal agencies relating to the construction and financing of such projects and conferring additional powers upon municipalities.'

COMPLAINANTS' EXHIBIT No. 687 (Excluded)

(5) "An Act entitled, 'An Act validating, ratifying, approving and confirming all bonds, notes, warrants and other instruments, obligations, and/or evidences of indebtedness heretofore issued and sold by any incorporated city or town, county or special taxing district to the United States of America or any agency or instrumentality thereof.'

(6) "An Act entitled, 'An Act validating, ratifying, approving and confirming all agreements heretofore entered into between incorporated cities or towns, counties and/or special taxing districts of this state and the United States of America for the making of any loan and/or grant under the National Industrial Recovery Act, and all proceedings taken in performance, in whole or in part, of any such agreements, including the authorization of any bonds, notes, warrants and other instruments, obligations and/or evidences of indebtedness, and authorizing completion of all such proceedings, including the issuance, sale and delivery of such bonds.'

(7) "An Act entitled, 'An Act to amend an act entitled "An Act providing for the creation and establishment for the State of Tennessee of a State Board for Licensing General Contractors; providing for the appointment and qualification of the members and the organizations and jurisdiction thereof; for the purpose of safeguarding life, health and property, and of promoting public welfare by requiring that only properly qualified persons shall engage in general contracting; prescribing the duties of and the grant of powers to said Board to issue certificates of license and to regulate the practice of general contracting in the State of Tennessee, to fix the standards of qualification and eligibility for the practice thereof; to authorize the collection and expenditure of fees for the purpose of this Act, and to make all such legal rules and regulations necessary and proper to carry out the purpose of this Act; and providing penalties for violation of this Act," approved July 2, 1931 and being Chapter 70 of the Public Acts of the General Assembly of Tennessee of 1931, to provide that the provisions of said Act shall not apply to any public work or project financed in whole or in part by a loan or grant or both from the United States of America, or any agency or instrumentality thereof.'

COMPLAINANTS' EXHIBIT No. 687 (Excluded)

(8) "An Act entitled, 'An Act to constitute and confirm certain educational institutions of the State as separate legal entities; to confer powers upon such educational institutions, including the powers to purchase, construct, better and equip buildings and to make other improvements to their plants, and for such purposes to borrow money and accept grants from any federal agency; to issue bonds and to provide for the payment of such bonds and interest thereon and to secure such payment; to confer further [fol. 3359] powers for the making of agreements with the holders of such bonds; to supersede inconsistent provisions of all other laws; and to declare an emergency.'

(9) "An Act entitled, 'An Act to declare the necessity of creating public bodies corporate and politic to be known as housing authorities to engage in slum clearance and/or projects to provide dwelling accommodations, for persons of low income; to provide for the creation of such housing authorities; to define the powers and duties of housing authorities and to provide for the exercise of such powers, including acquiring property by purchase, gift or eminent domain, and including borrowing money, issuing revenue and credit bonds and other obligations, and giving security therefor; to confer remedies on obligees of housing authorities; to provide that the bonds of the authority shall be legal investments; and to declare that this act take effect from the date of its passage.'

(10) "An Act entitled, 'An Act to authorize cities and towns and the State, its subdivisions and agencies to cooperate with housing authorities and the United States of America by rendering services, conveying or leasing property, and providing for streets, roads and other facilities, and otherwise; and to declare that this act take effect from the date of its passage.'

(11) "An Act entitled, 'An Act to authorize corporate agencies of the United States and corporations receiving aid from the United States to exercise the power of eminent domain to acquire property for housing projects; and to declare that this act take effect from the date of its passage.'

(12) "An Act entitled, 'An Act creating the Rural Electrification Authority of Tennessee for the purpose of pro-

COMPLAINANTS' EXHIBIT No. 687 (Excluded)

moting and encouraging the fullest possible use of electric energy in the State by making electric energy available to certain inhabitants of the State at the lowest cost consistent with sound economy and prudent management; authorizing the Authority to sell and distribute electric energy and to construct or otherwise acquire a system or systems for the generation, transmission and distribution of electric energy to carry out the purposes of this Act; providing for the rights, powers and duties of the Authority; authorizing and regulating the issuance of bonds by the Authority; and providing for the payment of such bonds and the rights of the holders thereof.'

(13) "An Act entitled, 'An Act providing for the creation of power districts; prescribing powers and duties of such districts, and authorizing such districts to conduct and operate utilities for the production, transmission or distribution of electric energy, and to issue bonds and providing for the payment of such bonds.'

[fol. 3360] (14) "An Act entitled, 'An Act providing for the formation of non-profit membership corporations to be known as Electric Membership Corporations for the purpose of promoting and encouraging the fullest possible use of electric energy by making electric energy available at the lowest cost consistent with sound economy and prudent management of the business of such corporations; providing for the rights, powers and duties of such corporations; authorizing and regulating the issuance of bonds by such corporations and providing for the payment of such bonds and the rights of the holders thereof'."

The specific purposes which the Public Works Administrator has in mind in asking for the enactment of these laws are further described in his letter as follows:

"The first bill, which may be cited as the Public Works Act of 1935, confers powers upon cities and towns to engage in public works projects which it is not clear that present laws permit them to undertake. The powers of cities and towns to borrow money and issue bonds are also clarified and placed in a single comprehensive act. Similar bills enacted into laws in other states have proved very helpful.

"The second bill, which may be cited as the County Pub-

COMPLAINANTS' EXHIBIT No. 687 (Excluded)

lic Works act of 1935, confers powers upon counties to construct and finance public works projects which are appropriate to the corporate purposes of counties, and is analogous to the first bill.

"The third bill, which may be cited as The Revenue Bond Act of 1935, authorizes the issuance of bonds by cities and towns for the purpose of financing the construction of revenue-producing undertakings, such bonds being payable solely from the revenues of such undertaking, without recourse to tax levies, legislation similar to this bill has been enacted in more than thirty states.

"The fourth bill, which may be cited as The Municipal Emergency Procedure Act of 1935, applies to counties, cities, towns, and special taxing districts. Its purpose is to eliminate technical difficulties which tend to impede the closing of loans from the Public Works Administration, to delay the beginning of construction on Public Works projects, and to obstruct the carrying out of the rules and regulations prescribed by the Administration.

"The fifth bill, which may be cited as the 1935 Validating Act, is intended to validate bonds which have been purchased by the Public Works Administration. You will recall that as funds were advanced to each applicant you addressed a letter to me in which you stated that you would be glad to cooperate in securing legislation to validate any defects or irregularities in connection with the specific project then in question. Rather than give you a number of validating bills, it has seemed more convenient and equally as effective to draft a single bill covering all bonds heretofore issued to the Government.

[fol. 3361] "The sixth bill does not relate to the validation of bonds which have already been purchased by the Administration but is concerned with the validation of loan and grant agreements between the United States and cities, towns, counties and special taxing districts of Tennessee, and also with the validation of election and other proceedings heretofore taken by such municipalities which are defective to such an extent that unless the proceedings are ratified by this curative bill, it may be necessary to request that the proceedings in certain cases be taken again.

"The seventh bill amends the act which establishes State board for licensing general contractors by providing that

COMPLAINANTS' EXHIBIT No. 687 (Excluded)

the act shall not apply to public works projects. I recognize the fact that this is a matter of state policy and I want to make it clear that the fact that I am suggesting this bill is not in any way intended as a criticism of the State Licensing Board. Our experience has indicated that the act is equitably administered and we have received splendid cooperation from the Board. The limitations of the act, however, are such that the field of competition is seriously restricted. Much may be said in favor of the licensing act which this bill amends, but the reasons for the licensing of contractors do not exist to the same degree in the case of projects financed by the Public Works Administration which are under constant supervision by our engineer inspectors.

"The eighth bill is intended to authorize state educational institutions to borrow money for the purpose of constructing revenue producing improvements and to issue bonds payable solely from the revenue of such improvements. Similar legislation has been enacted in several states. The bill presents some constitutional questions which may ultimately have to be determined by the Supreme Court of Tennessee.

"The ninth, tenth and eleventh bills, if enacted into law, will provide enabling legislation pursuant to which public bodies in your State will be able to participate in a Federal low-cost housing program. These bills involve certain matters of legislative policy which may require adjustment to meet local needs. You undoubtedly will desire to make certain changes and I suggest that you communicate with Colonel Horatio B. Hackett, Director of the Housing Division of the Public Works Administration, in regard thereto.

"The twelfth, thirteenth and fourteenth bills, which may be cited respectively as the State Rural Electrification Authority Act, the Power District Law and the Electric Membership Corporation Act, illustrate different methods of attacking the problem of encouraging the fullest possible use of electric energy in the State."

An examination of each of these bills will reveal that they are emergency measures, and expire by their own limitations June 30th, 1937. They are intended to obviate legal difficulties that the National Public Works Administration

COMPLAINANTS' EXHIBIT No. 687 (Excluded)

has encountered during the last year and a half in the ex-[fol. 3362] penditure of such funds in Tennessee.

The eighth of these bills, as enumerated in the letter of Secretary Ickes to me, would be unconstitutional if enacted in its present form, as I am advised by Attorney General Beeler. If the substance of the measure should be agreed to by your honorable bodies, it must be put in a radically different form.

The bills numbered nine, ten and eleven are measures designed to further the Housing program of the Federal Government, and are intended to take the place of a bill on this subject introduced prior to the legislative recess, and the final enactment of which was delayed at the request of agents of the Public Works Administrator. The bills on this subject now laid before you only apply to municipal corporations having a population of twenty thousand and over.

The bills numbered 12, 13 and 14 are three bills that are designed to give rural sections of Tennessee the benefit of the cheap electric power to be generated by the Tennessee Valley Authority in our State. I have submitted them to the Tennessee Valley Authority and they recommend their enactment, though it is possible that they will desire hereafter to make certain changes from their present form.

The bills numbered 1 and 2 of the series now submitted to you, confer for two years additional emergency powers upon cities and towns of Tennessee to issue bonds with which to aid the Federal program for the construction of such municipal public works. In addition to already existing charter powers, the powers that municipal corporations now have in our State on this subject are set forth in Sections 3608 of the Code of 1931. So far as the additional powers sought to be given cities and towns under Act No. 1 are concerned, it seems to me that it would be more easily accomplished by an amendment to these sections which have been upon the statute books of our State since 1917. How-[fol. 3363] ever, I transmit the Act to you in the form in which it has been drafted at Washington, and as recommended to me by the Public Works Administrator.

It should be pointed out, however, that the powers sought to be conferred upon the various counties of Tennessee by Bill No. 2 do not already exist under general laws of the

COMPLAINANTS' EXHIBIT No. 687 (Excluded)

State, as is the case with municipal corporations. In order to confer general powers upon counties to issue bonds for the purposes named, it would either be necessary to enact this Bill No. 2 or to extend the provisions of Section 3696 to 3708 of the Code to counties.

There will doubtless be differences of opinion among you as to the wisdom of the enactment of several of these bills. It is certain that you will desire to amend some of them. I recommend their enactment to you in view of the grave emergency that exists in the State.

The National Government, by the enactment of the large Public Works Appropriation bill, which has been before Congress for a number of weeks, now proposes to deal with the unemployment problem in the nation in a manner quite different from the way in which it has been dealt with during the last two years. It is the purpose of the President now to relieve this situation by putting men to work in the construction of public works enterprises on a scale not heretofore possible. Tennessee has already sent to the National Administrator, a long list of public works which it is hoped will be undertaken with funds appropriate in the bill before mentioned.

The President has not as yet indicated in just what manner the sum carried by the bill will be allocated to the several States, nor the details of the method of its expenditure, but it was in anticipation of the enactment of this Public Works measure soon to be signed by the President that all of the bills now transmitted to you were prepared by the Public [fol. 3364] Works Administrator at Washington.

You are shortly to adjourn and it would be a calamity of Tennessee if we failed to obtain the allotments that would otherwise be given to us by our failure to meet the conditions requested by the National Administrator.

I respectfully urge upon your honorable bodies the prompt reference of these bills to your appropriate committees and their enactment into law, as is requested by Secretary Ickes.

Respectfully, (Signed) Hill McAlister, Governor.

Nashville, Tennessee, this 8th day of April, 1935.

[fol. 3365] COMPLAINANTS' EXHIBIT No. 688 (Excluded)

Certificate of Incorporation issued by the State of Tennessee to the Middle Tennessee Electric Membership Corporation.

(Omitted)

[fol. 3366] COMPLAINANTS' EXHIBIT No. 689

Subpoena Duces Tecum

The President of the United States to Tennessee Valley Authority, Greeting:

You are hereby commanded to appear before the District Court for the Eastern District of Tennessee, Northern Division, in the courtroom of the Federal Building at Chattanooga, Tennessee, on the — day of —, 1937, at — o'clock A. M.,

Books and records of Tennessee Valley Authority showing (a) the number of employees in the Department of Electricity as of October 1, 1937, and (b) the headquarters or offices of each of said employees as of October 1, 1937, and (c), the names of any additional employees in said Department of Electricity who are now employed in said Department and earning compensation at a rate of Fifteen Hundred Dollars (\$1500) per annum, or over, other than those whose names are published in the Annual Report of Tennessee Valley Authority for the fiscal year ending June 30, 1936,

and fail not under penalty of law.

Witness the Honorable Judge of the United States District Court for the Eastern District of Tennessee, this — day of —, 1937.

— —, by — —.

Let this writ issue. — —, Presiding Judge.

[fol. 3367] COMPLAINANTS' EXHIBIT No. 690

Subpoena Duces Tecum.

The President of the United States to Tennessee Valley Authority, Greeting:

You are hereby commanded to appear before the District Court for the Eastern District of Tennessee, Northern Di-

COMPLAINANTS' EXHIBIT No. 690

vision, in the courtroom of the Federal Building at Chattanooga, Tennessee, on the — day of —, 1937, at — o'clock A. M., and bring with you the following documents and records, to wit:

Copy of letter dated on or before October 15, 1934, from TVA (Lilienthal) to Mayor Overton of Memphis, relating to the possible purchase by TVA of Memphis Power & Light Company,

and fail not under penalty of law.

Witness the Honorable Judge of the United States District Court for the Eastern District of Tennessee, this — day of —, 1937.

— —, by — —.

Let this writ issue. — —, Presiding Judge.

[fol. 3368] COMPLAINANTS' EXHIBIT No. 691

Subpoena Duces Tecum

The President of the United States to Tennessee Valley Authority, Greeting:

You are hereby commanded to appear before the District Court for the Eastern District of Tennessee, Northern Division, in the courtroom of the Federal Building at Chattanooga, Tennessee, on the — day of —, 1937, at — o'clock A. M., and bring with you the following documents and records, to wit:

Copy of letter or letters dated on or before March 27, 1934, from TVA or Lilienthal to the President of the United States or Federal Trade Commission, requesting that an examination be made of the books and records and capitalization of Tennessee Public Service Company.

Copy of letter dated on or about June 30, 1937, from Director H. A. Morgan to John N. Garner, President of the Senate.

Copy of letter dated on or about July 20, 1936, from TVA signed by J. M. Peavey, to K. T. Hutchinson, President, Middle Tennessee EMC.

Copy of letter dated September 4, 1937, from Llewellyn Evans to the City Manager of the City of Knoxville, Tenn.,

COMPLAINANTS' EXHIBIT No. 691

(Dempster) approving the plans of said City for construction of an electric distribution system.

All letters and telegrams between TVA or any of its representatives and National Power Policy Committee or any of its representatives or members, from July 9, 1934, to date.

All surveys made by Tennessee Valley Authority or by any individual, corporation, association or agency, either public or private, and furnished to Tennessee Valley Authority of any of the customers of any of the complainants, together with any estimates relating thereto showing the consumer demand, cost of service to or revenues from said customers or any of them.

[fol. 3369] COMPLAINANTS' EXHIBIT No. 692

Subpoena Duces Tecum

The President of the United States to Tennessee Valley Authority, Greeting:

You are hereby commanded to appear before the District Court for the Eastern District of Tennessee, Northern Division, in the courtroom of the Federal Building at Chattanooga, Tennessee, on the — day of —, 1937, at — o'clock A. M., and bring with you the following documents and records, to wit:

Letter dated on or about August 7, 1933, from U. S. Senator Black of Alabama to TVA, re Wheeler Dam.

Copy of letter dated on or about August 24, 1933, from TVA to U. S. Senator Black, re Wheeler Dam.

Letter dated on or about September 8, 1933, from U. S. Senator Black to TVA, re construction of Wheeler Dam.

Telegram dated on or about September 22, 1933, from U. S. Senators Black and Bankhead of Alabama to TVA, re construction of Wheeler Dam,

and fail not under penalty of law.

Witness the Honorable Judge of the United States District Court for the Eastern District of Tennessee, this — day of —, 1937.

— —, by — —.

Let this writ issue. — —, Presiding Judge.

[fol. 3370] COMPLAINANTS' EXHIBIT No. 693

Subpoena Duces Tecum

The President of the United States to Tennessee Valley Authority, Greeting:

You are hereby commanded to appear before the District Court for the Eastern District of Tennessee, Northern Division, in the courtroom of the Federal Building at Chattanooga, Tennessee, on the — day of —, 1937, at — o'clock A. M., and bring with you the following documents and records, to wit:

All letters and telegrams between TVA or any of its representatives and Rural Electrification Administration or any of its representatives, from and after May 11, 1935, having to do with or discussing the organization, construction of lines, sale of electric energy to, or operating reports of any of the electric power cooperatives or electric membership associations in the states of Tennessee, Alabama, Mississippi, Georgia and Kentucky, or any of them,

and fail not under penalty of law.

Witness the Honorable Judge of the United States District Court for the Eastern District of Tennessee, this — day of —, 1937.

— — —, by — — —.

Let this writ issue. — — —, Presiding Judge.

[fol. 3371] COMPLAINANTS' EXHIBIT No. 694

Subpoena Duces Tecum

The President of the United States to Tennessee Valley Authority, Greeting:

You are hereby commanded to appear before the District Court for the Eastern District of Tennessee, Northern Division, in the courtroom of the Federal Building at Chattanooga, Tennessee, on the — day of —, 1937, at — o'clock A. M., and bring with you the following documents and records, to wit:

Copy of the outgoing news dispatch or press release dated on or about September 7 or 8, 1937, containing a

COMPLAINANTS' EXHIBIT No. 694

summary of the power generation and gross revenue for the fiscal year ending June 30, 1937.

A copy of the speech given by David E. Lilienthal on or about November 17, 1933, before the Civitan and Shrine Clubs of Knoxville, Tennessee, or a copy of the report thereof or the portions or excerpts therefrom released, sent or handed out to newspapers at or about said date as a press release or otherwise.

and fail not under penalty of law.

Witness the Honorable Judge of the United States District Court for the Eastern District of Tennessee, this — day of —, 1937.

— — —, by — — —.

Let this writ issue. — — —, Presiding Judge.

— — —

[fol. 3372] COMPLAINANTS' EXHIBIT No. 695

Subpoena Duces Tecum

The President of the United States to Tennessee Valley Authority, Greeting:

You are hereby commanded to appear before the District Court for the Eastern District of Tennessee, Northern Division, in the courtroom of the Federal Building at Chattanooga, Tennessee, on the — day of —, 1937, at — o'clock A. M., and bring with you the following documents and records, to wit:

Copy of circular letter dated on or about September 21, 1936, from TVA signed by B. S. Robinson, entitled "Another Electrical Fair For Your Benefit."

Copy of letter dated on or about April 7, 1937, from E. W. Baughman, TVA Division Superintendent, to Mr. Wingo, Gibson County Agent.

Copy of letter dated on or about February 21, 1936, from W. H. Halsey, Commercial Field Supervisor, to all cooperating dealers, distributors and wiring contractors.

A copy of all forms of letters, or other communications prepared by TVA or any of its representatives and de-

COMPLAINANTS' EXHIBIT No. 695

livered or sent to any of the county agents engaged in co-operative extension work in agriculture and home economics in the states of Tennessee, Alabama, Mississippi, Georgia and Kentucky, or any of them, having to do with or discussing the generation, transmission, distribution, sale or marketing of electric energy or benefits of farm or rural electrification or the creation of a consumers demand therefor, and any and all replies thereto or reports or memoranda received from TVA from any of said county agents.

The books and records of Tennessee Valley Authority showing the amount expended in promotional and advertising expenses for the development of electric energy and sale for each of the years 1933 to date.

[fol. 3373] The books and records of TVA showing the payment of a fee, salary or wages to Walter E. Meyer on or before December 1934 and the payment of the purchase price of 50,000 copies of the December 1934 issue of the Journal of National Education Association containing an article by said Walter E. Meyer entitled "The Tennessee Valley Looks to the Future."

and fail not under penalty of law.

Witness the Honorable Judge of the United States District Court for the Eastern District of Tennessee, this — day of —, 1937.

—, by —.

Let this writ issue. —, Presiding Judge.

[fol. 3374] COMPLAINANTS' EXHIBIT No. 696

Subpoena Duces Tecum

The President of the United States to Tennessee Valley Authority, Greeting:

You are hereby commanded to appear before the District Court for the Eastern District of Tennessee, Northern Division, in the courtroom of the Federal Building at Chattanooga, Tennessee, on the — day of —, 1937, at — o'clock A. M., and bring with you the following documents and records, to wit:

COMPLAINANTS' EXHIBIT No. 696

Letter dated on or about October 16, 1933, from Harry Berry, Engineer of the Tennessee Public Works Board, to TVA or Director Lilienthal, and copy of reply thereto.

Copy of letter between the dates of October 16 and November 2, 1933, from TVA or Lilienthal to PWA or Administrator Ickes, mentioning letter from Harry Berry referred to above, and letter in reply thereto.

Telegram dated on or about December 4, 1933, from Glenn, Mayor of Florence, Ala., to TVA or Lilienthal, and reply thereto on or about December 5, 1933.

Copy of letter dated on or about December 7, 1933, from TVA (Lilienthal) to Mayor Glenn of Florence, Ala.

Copy of telegram dated on or about December 27, 1933, from TVA (Lilienthal) to Mayor Glenn of Florence, Ala.

Letter dated on or about January 4, 1934, from TVA (Lilienthal) to Mayor of Florence, Ala.

Copy of telegram dated on or about January 4, 1934, from Lilienthal to Sheffield and Tuscumbia, Ala., stating that PWA loans approved would be released.

Copies of letters or telegrams dated on or about March 13, 1934, from TVA to PWA or Ickes requesting appointment or describing the then status of negotiations for purchase by City of Knoxville of facilities of Tennessee Public Service Company.

Copy of letter dated on or about March 19, 1934, from TVA (Lilienthal) to Mayor Glenn of Florence, Ala.

[fol. 3375] Copy of letter dated on or about March 22, 1934, from TVA or Lilienthal to PWA or Harold Ickes, re negotiations for purchase of properties of Tennessee Public Service Company in and about Knoxville.

Telegram dated on or about June 19, 1934, from W. L. Farr, Mayor of Tuscumbia, Ala., to TVA or Lilienthal.

Copy of telegram dated on or about June 20, 1934, from Lilienthal to Mayor Farr, of Tuscumbia, and copies thereof mailed to the Mayors of Sheffield and Florence, Ala.

Telegram dated on or about June 21, 1934, from Mayor Lee Glenn of Florence, Ala., to Lilienthal.

Telegram dated on or about June 27, 1934, from A. H. Carmichael to Lilienthal.

Copy of telegram dated on or about July 10, 1934, from TVA (Lilienthal) to Mayor Glenn of Florence, Ala.

COMPLAINANTS' EXHIBIT No. 696

Copy of letter dated August 27, 1937, from TVA to Tennessee PWA Administrator, probably Harry S. Berry or Kenneth Markwell, approving the plans of the City of Knoxville, Tenn., for an electric distribution system.

All letters and telegrams between TVA or any of its representatives and PWA or any of its representatives from and after July 1, 1933, relating to the applications of any of the cities or towns of Decatur, Sheffield, Tusculumbia, Courtland, Hartselle, Muscle Shoals, Russellville, Gunter'sville, Tarrant City, Bessemer and Florence, Alabama; Starkville, Okolona and Aberdeen, Mississippi; Knoxville, Memphis, Newbern, Paris, Somerville, Jackson, Fayetteville, Murfreesboro, Lenoir City, Lewisburg and Columbia, or Chattanooga, Tennessee, for federal loans and grants of funds from PWA for the construction of a municipal electric distribution system in any of said cities or towns.

All letters and telegrams between TVA or any of its representatives and PWA or any of its representatives from and after March 3, 1934, relating to negotiations for or attempts to purchase all or any part of the electric properties of Tennessee Public Service Company in and about Knoxville, Tenn., or the disposition to be made of the PWA allotment for the City of Knoxville for the construction of an electric distribution system.

and fail not under penalty of law.

Witness the Honorable Judge of the United States District Court for the Eastern District of Tennessee, this — day of —, 1937.

— —, by — —.

Let this writ issue. — —, Presiding Judge.

[fol. 3376] COMPLAINANTS' EXHIBIT No. 697

Subpoena Duces Tecum

The President of the United States to Tennessee Valley Authority, Greeting:

You are hereby commanded to appear before the District Court for the Eastern District of Tennessee, Northern

COMPLAINANTS' EXHIBIT No. 697

Division, in the courtroom of the Federal Building at Chattanooga, Tennessee, on the — day of —, 1937, at — o'clock A. M., and bring with you the following documents and records, to wit:

Letter dated on or about October 5, 1934, from PWA signed by Henry T. Hunt to TVA or Lilienthal in reference to applications for loans and grants or contracts with Bessemer and Tarrant City, Ala.

Letter dated on or about November 17, 1934, from PWA signed by Henry T. Hunt to TVA or Lilienthal relating to TVA option to purchase Alabama Power Company properties in Alabama towns and copy of the reply thereto dated on or about November 22, 1934.

Letter dated on or about December 21, 1934, from PWA signed by Henry T. Hunt to TVA or Lilienthal relating to Hartselle, Ala., and copy of reply thereto dated on or about December 28, 1934.

and fail not under penalty of law.

Witness the Honorable Judge of the United States District Court for the Eastern District of Tennessee, this — day of —, 1937.

— — —, by — — —.

Let this writ issue. — — —, Presiding Judge.

[fol. 3377] COMPLAINANTS' EXHIBIT No. 698

Resolution of the Board of Directors of TVA, Dated August 21, 1936

"Resolved, That the Board of Directors hereby approves the following pool level elevations at Chickamauga Dam:

Surcharge for flood control	Elev. 685
Surcharge for malaria control	Elev. 683
Normal pool level	Elev. 682
Minimum pool level	Elev. 675"

COMPLAINANTS' EXHIBIT No. 699

Resolution of the Board of Directors of TVA, Dated
November 18, 1933

"David E. Lilienthal reported the results of his conference to date with the manufacturers of electrical appliances. He was authorized by the Board to continue to cooperate with the manufacturers of electrical appliances in an effort to effect a marketing plan whereby residents of the Valley who have relatively low incomes can obtain standard electric equipment at very low cost."

[fol. 3378]

COMPLAINANTS' EXHIBIT No. 700 (Excluded)

Tennessee Valley Authority

Five-Year Program

Condensed Statement

	Total	1934	1935	1936	1937	1938	1939
Dam and Power House Construction.....	\$129,400,000	\$7,150,000	\$20,750,000	\$32,700,000	\$19,500,000	\$24,300,000	\$25,000,000
Land Purchase.....	27,300,000	2,300,000	11,900,000	6,350,000	4,850,000	1,800,000	200,000
Land Clearing.....	9,320,000	920,000	4,450,000	2,000,000	950,000	950,000	50,000
Camps, Highways, etc.....	6,630,000	2,950,000	1,450,000	1,300,000	900,000	.....	.....
Highway and Railroad Relocation.....	19,500,000	200,000	8,550,000	1,450,000	2,200,000	4,400,000	2,700,000
Locks.....	5,800,000	.....	.....	700,000	2,200,000	2,200,000	700,000
Total Dam Construction.....	\$197,950,000	13,520,000	47,130,000	44,500,000	30,500,000	33,750,000	28,650,000
Power Program.....	43,450,000	5,150,000	20,100,000	4,800,000	3,800,000	4,800,000	4,800,000
Agriculture and Fertilizer.....	15,310,000	1,940,000	3,860,000	2,410,000	2,360,000	2,360,000	2,360,000
General Program.....	24,450,000	1,100,000	4,750,000	4,650,000	4,650,000	4,650,000	4,650,000
Supervision and Coordination.....	2,750,000	250,000	500,000	500,000	500,000	500,000	500,000
Total.....	\$283,910,000	21,980,000	76,340,000	56,860,000	41,810,000	45,960,000	40,960,000

[fol. 3379] COMPLAINANTS' EXHIBIT No. 701.

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 531:

TVA Minutes, June 26, 1933.

"The Board directed counsel to request the Federal Power Commission not to grant further licenses in the Tennessee River basin, and authorized counsel to file appearances and take appropriate action to oppose the granting of such further licenses."

[fol. 3380] COMPLAINANTS' EXHIBIT No. 702 (Excluded).

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 531:

TVA Minutes, July 11, 1933.

"The discussion raised the issue of whether the Authority should seek an area arrangement with the Commonwealth & Southern Corporation under which the Authority would refrain from serving municipalities outside a particular area, provided the Commonwealth & Southern Corporation would refrain from operating within the area to be served by the Authority. It was suggested on the one hand that the arrangement was worth attempting; that it would be feasible; and that it would carry into effect the purposes of the President. On the other hand, it was pointed out that such an area arrangement was impracticable; that general co-operation from utilities could not be anticipated in view of the adverse effect such policy would have upon their position; that such a commitment would be premature at this time; that such an area arrangement would probably require many municipalities to acquire [fol. 3381] a distribution system, a long and slow process; that other municipalities outside such area in the meantime, would be denied service unnecessarily; and that much valuable time would be lost which should be devoted to carrying forward the objectives of the Corporation. As an alternative, David E. Lilienthal proposed that immedi-

COMPLAINANTS' EXHIBIT No. 702 (Excluded).

ate steps be taken to enter into wholesale power contracts with the cities of Florence, Tuscumbia and Sheffield, Alabama, using these municipalities as a proving ground and entering wedge. He suggested that the Authority's subsequent course be determined by events as they develop."

[fol. 3382] COMPLAINANTS' EXHIBIT No. 703 (Excluded).

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) 532:

TVA Minutes, July 30, 1933.

"Policies concerned with the power project were discussed. The question arose as to whether friendly attempts should be made to buy out power companies or whether the Authority should refuse to deal with them. It was suggested that the views of President Roosevelt and Senator Norris be obtained on this point.

Arthur E. Morgan proposed that an area be delimited roughly equal in size and corresponding in many respects to the Tennessee River drainage basin, in which the Tennessee Valley Authority might buy up the private power company properties. Under this proposal the Authority would have a clear field in which to operate.

It was suggested that a study be made of this proposal and of the cost involved. David E. Lilienthal was authorized to make such investigation and to employ as much help as is needed for this and other power studies to be made by him. It was understood that before the key positions [fol. 3383] are filled the names of applicants for these positions must be submitted to the Board for approval.

The Aurora power project, which comes before the Federal Power Commission for decision August 17, was discussed. Arthur E. Morgan suggested that it might be well for the Tennessee Valley Authority to condemn the Aurora and Tennessee sites, as well as all other sites located by the Army Engineers, in order that the Tennessee Valley Authority would have control of future power developments in the area.

COMPLAINANTS' EXHIBIT No. 703 (Excluded.)

David E. Lilienthal suggested that wholesale power rates be definitely worked out on a conservatively basis for the three communities near Muscle Shoals.

Construction of a transmission line from the Muscle Shoals plants to the Cove Creek Dam site was discussed by the Board which gave careful consideration to the time needed to build the line and to the engineering staff required to supervise its construction. The Board adopted the following resolution:

[fol. 3384] 'Resolved, that at the earliest possible date the Board proceed with the construction of a transmission line from Wilson Dam to Cove Creek Dam site, to provide power for construction purposes and for distribution to cities, counties and municipalities as from time to time may be necessary or desirable.'

In reaching this conclusion, it was pointed out that a tie-line connecting Muscle Shoals and Cove Creek Dam was essential to co-ordinated operation of the two power plants and that existing transmission lines of private companies were too circuitous and not feasible otherwise. The decision to construct the tie-line was based upon the following facts: That low prices now exist but higher prices are predicted; that a considerable number of applications for power service from communities located near the transmission line have been received; that the need for power at Cove Creek for construction work is imperative; and that the demand for employment is great."

[fol. 3385] COMPLAINANTS' EXHIBIT No. 704 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 533:

TVA Minutes, August 5, 1933.

"It was decided that all publicity shall issue through the publicity department and that special publicity dealing with particular phases of the work shall have the approval of the director concerned before it is released."

[fol. 3386] COMPLAINANTS' EXHIBIT No. 705 (Excluded).

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 534:

TVA Minutes, September 18, 1933.

"The chairman discussed the possibility of constructing the General Joe Wheeler Dam in the near future. He stressed the need for having available complete information on other projects, such as the Aurora Landing and Chickamauga Dams, so the Board would be in position to deal with proposals regarding such projects. David E. Lilienthal pointed out a conflict of interests in this connection, suggesting that the Corporation must not ruin its power market by making available at once extraordinarily large amounts of power, but that it must be ready to deal with questions regarding these projects as they arise. He suggested that the cost of the preliminary investigations and construction work on such projects should, insofar as consistent, be allocated against navigation and unemployment relief and not alone against the power project. The Chairman concurred in this, stating that the Authority should not accept unwarranted charges against the power development. Harcourt A. Morgan warned the Board [fol. 3387] that Congress may force the Authority to build other dams as an emergency measure. He suggested that the Board make reasonable preparations in anticipation of such action. It was decided that the Chairman should see Senator Bankhead and discuss with him the policy of the Public Works Administration about the possible construction of other dams. David E. Lilienthal will consider various projects which have been suggested to get a general picture of possibilities and report at a future meeting."

[fol. 3388] COMPLAINANTS' EXHIBIT No. 706 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 535:

TVA Minutes, September 21, 1933

"The Board discussed what its policy should be with reference to the proposed construction of the General Joe

COMPLAINANTS' EXHIBIT No. 706 (Excluded)

Wheeler Dam with funds to be supplied by the Public Works Administration. David E. Lilienthal submitted a proposed statement of policy which has been approved by the Board. A true copy of the statement labeled exhibit 9-21-33-b, is attached to these minutes and made a part hereof.

The proposed statement of policy attached to the foregoing minutes is exhibit No. 9-31-33-b, which is as follows:

Statement of Policy

Part I.

The Authority has been requested by public agencies by members of Congress representing this area, by leading citizens and by private groups to cooperate and participate in securing funds from the Public Works Administration to be devoted to various public works projects intended to provide unemployment relief.

1. In General. The Board, of course, being a public agency heartily favors large expenditures within the Tennessee Valley to relieve the acute distress which exists because of the depressed state of industry and agriculture. Few agencies are in a position to know more intimately the acuteness of this situation, and therefore, few can feel more strongly the dire need of adopting every measure of reemployment.

2. Power and Navigation Dams to be constructed and held by the Authority.

The Board conceives that the power phase of the Authority's work was intended by Congress to operate on business principles and was to be self-liquidating and self-supporting. Therefore, if the Board were to construct additional facilities for power production in the way of power dams, this would result in additions to capital account against which heavy fixed charges will run. The Board is now spending from its appropriation, substantial sums in the construction of Norris Dam and in the construction of a transmission line between Wilson and Norris Dam. If business principles are to be observed as the policy of Congress requires, then the

COMPLAINANTS' EXHIBIT No. 706 (Excluded)

Board should not expend further sums than those indicated [fol. 3390] applicable to Norris Dam and the transmission line for power production purposes, until a market has been found which will support the existing investment and the investment now being made in Norris Dam and the transmission line.

To add further to the Authority's fixed capital charges by way of additional construction of power dams, until a market has been found for existing investment might make the conduct of the power project of the Authority impossible on a self-supporting basis for many years to come. Such a result might well imperil the future, not only of the power project but of the broad plan of the Tennessee Valley Authority Act.

If, however, the construction of additional dams by the Authority is explicitly treated as a reemployment measure, then the Authority would be pleased to proceed with such construction as rapidly as possible, provided the funds are supplied from the funds of the Public Works Administration appropriated for industrial recovery purposes, and provided further that in our accounting it is understood that additional dam facilities are needed for power purposes [fol. 3391] the additional investment will not be carried as a power investment of the Authority, but would be treated as any expenditure for other public works enterprise, chargeable against the Public Works Administration and for the purposes of that administration. Then when such dam becomes useful, because of the market situation, for power production by the Authority, the Authority would then and not until then begin to be charged with the investment and the fixed charges applicable thereto.

Subject to these qualifications, the Board of Directors heartily approves the immediate construction of Dam No. 3, as an unemployment relief measure. An important consideration in our conclusion is the fact that the construction of Dam No. 3 will be a substantial aid to navigation on the Tennessee River below Chattanooga. Navigation locks are, in fact, now in process of construction by the Army Engineers at Dam No. 3. This position we conceive to be in the interest of the public welfare.

COMPLAINANTS' EXHIBIT No. 706 (Excluded)

[fol. 3392]

Part Two

Power dams to be constructed with Public Works money by public agencies other than the Authority or by private agencies using Public Works money.

If the Tennessee Valley Authority power program is to function as a business enterprise as Congress has directed, it must secure a reasonably adequate market in which to sell the power it has available.

It is now proposed that there be constructed within the Authority's market area, additional power facilities, primarily as an unemployment relief measure. Whatever the primary purpose, the effect would be to add further public power facilities to those already existing and in process of construction by the Authority. These additional facilities would be paid for principally from the same source as are the funds with which the Authority operates, namely, public monies. Such further facilities would be constructed on a public stream over which the Authority has been given responsibility, that its development shall be according to a plan formulated and executed by the Authority. On the one hand, therefore, Congress has directed the Authority to operate certain existing and future power facilities on a [fol. 3393] self-supporting basis, which implies the acquisition of a market. On the other hand, the proposal of additional construction at this time would add to the publicly financed power facilities in the same market area in such a way as to render more difficult of accomplishment the direction of Congress that the power development functions of the Authority function on a self-supporting basis. The addition of other publicly financed power facilities in the Authority's market area will make more difficult the attachment of a market adequate to support the Authority's present facilities or facilities in process of construction. In short, the effect would be that in one enactment Congress would tend to negative another enactment in the same session.

Therefore, we do not approve the construction of any dams for the production of power within the Tennessee Valley by agencies other than the Authority with public funds, at least until Muscle Shoals and Norris Dam's power has been marketed by the Authority. For these reasons, we have [fol. 3394] concluded to disapprove all Governmental loans

COMPLAINANTS' EXHIBIT No. 706 (Excluded)

for the production of additional power within the area of the Tennessee Valley.

We are of the opinion that, in general, to carry through the objective of the Tennessee Valley Act, of an integrated development of economic resources of the region, it is imperative that the water power resources be developed as a single system, with single ownership and control. While concrete cases may arise in which this principle would not apply, the rule, we believe, is generally sound."

"The minutes of said Board of the meeting held September 21, 1933, recites that a telegram was sent to Secretary Ickes advising that TVA approved the construction of Dam No. 3 'as an emergency employment relief measure, on condition that it is built with Public Works money and not with TVA money, that the carrying charges and construction costs shall not be charged to the TVA until the demand for power justifies the construction for the purpose. The dam is an integral part of the navigation program for the Tennessee River, and will be a part of the power development program when it is needed—this position we conceive to be in the interest of the public welfare. The Board of Directors of the Tennessee Valley Authority took formal action to this effect."

[fol. 3396] COMPLAINANTS' EXHIBIT No. 707 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 535:

TVA Minutes, September 29, 1933

This excerpt relates to application by a committee from Hamilton County, Tennessee, relative to the construction of Chickamauga Dam, proposing that TVA construct the dam with funds to be secured by Hamilton County under a contract with TVA for the latter's control and operation of the dam, such dam to make provision for future installation of power facilities. The Board adopted a resolution concurring in the suggestion based on the securing of the funds by Hamilton County, the dam to be purchased from Hamilton

COMPLAINANTS' EXHIBIT No. 707 (Excluded)

County, "on the basis of fair value" if Congress authorized TVA to do so and its discretion determines this course. It was to be understood that there would be no power operation of the dam by Hamilton County or any other agency "unless or until the Tennessee Valley Authority agrees, or unless operation is done directly by the Tennessee Valley Authority by recapture."

[fol. 3397] The resolution continued with this clause:

"It is understood that the participation of the Tennessee Valley Authority in its present construction is only to enable the county to carry on its unemployment relief program, and not because of present necessity of the dam."

[fol. 3398] COMPLAINANTS' EXHIBIT No. 708 (Excluded).

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwanderer, et al.) page 540:

TVA Minutes, October 13, 1933.

"David E. Lilienthal submitted a memorandum entitled 'basis for negotiation' which might serve as the basis for negotiations with private utilities. A copy of the memorandum is attached and made a part of these minutes. Alternative #1, proposing the sale of entire power output of the Authority to the private utility, subject to instruction as to the resale price in accordance with section 12 of the Act, is in the opinion of the Board not open to the Authority and that negotiations on this basis cannot be entered into. Alternative #2, proposing an agreement with the private utilities binding the Authority to confine its operations within a certain definite territory, was not considered by the Board to be a satisfactory basis for negotiations with privately owned utilities, and a definite binding agreement limiting the Authority's operations was not feasible as a matter of law or policy.

The Board was reminded of President Roosevelt's [fol. 3399] desire that the Authority's power operations be centered in a delimited area. The idea of dividing territory between privately owned utilities and the Authority

COMPLAINANTS' EXHIBIT No. 708 (Excluded).

met with the approval of the Board but the suggestion that the Authority be excluded from operating in certain areas was disapproved.

David E. Lilienthal called attention to an area in north-eastern Mississippi which he recommended as an excellent place for the Authority to start the development of a sound power program and recommended that this area be included in the Authority's operations. The Board was of the opinion that requests for power from areas contiguous to the Valley area should not be turned down, especially when such areas are near the power generating site.

The question was raised as to whether or not the power program which is being set up will provide a yardstick which can be applied with accuracy to the power industry. The consensus of opinion was that an accurate yardstick might be developed within three or four years if the Authority's power operations can be centered in a delimited area.

[fol. 3400] Arthur E. Morgan suggested that the Authority issue a statement of policy which would put it in a position of making a fair and practical attempt in a delimited area to develop a real yardstick which could be applied to the power industry.

David E. Lilienthal stressed the fact that the Authority must work towards an increase in the use of electricity as its main power outlet and that increased uses of current would benefit both the utility companies and the Authority. He called attention to the possibility of marketing electrical appliances and suggested that the Authority get permission from Congress to do this. This proposal met with the general approval of the Board. The Board decided to proceed with its program for furnishing power to three cities at Muscle Shoals and to the territory near Tupelo, Mississippi."

Attached to and made a part of these minutes of the meeting of the Board of Directors of the Tennessee Valley Authority held October 13, 1933, is an exhibit designated as exhibit 10-13-33-a—"Basis for negotiation" to the following effect:

[fol. 3401] "(A) That two major holding companies, the Commonwealth & Southern Corporation and the Electric Bond & Share Company own a network of transmission

COMPLAINANTS' EXHIBIT No. 708 (Excluded).

lines and distribution systems, together with generating facilities within the area of operations of the Tennessee Valley Authority. In the scale of rates charged by these companies these facilities are more than ample to meet existing effective demand for electric service and represent an investment of many millions of dollars. A substantial, and perhaps the major, part of the securities issued to finance these facilities are in the hands of the public.

“(B) The Tennessee Valley Authority has available about 105,000 KW of firm power at Muscle Shoals and with the completion of Norris Dam this will be more than doubled. The existing demand is being adequately supplied by privately owned utilities. There are only two ways whereby the Authority can dispose of this additional block of power: (1) Sale in bulk to the private utilities. Since these utilities have now adequate supplies, this alternative [fol. 3402] implies the creation of additional demand consequent upon either a substantial industrial development or a substantial increase in domestic farm use, rendering existing privately owned facilities inadequate. Distribution would continue to be through the facilities of existing companies. Rates to the ultimate consumer of power purchased from the Authority would be regulated by the Authority under terms of the contract of purchase.

— (2) By the sale of such power to the municipalities or to the public agencies which are now being served by private utilities. The Authority might dispose of its power by taking part of the field now occupied and served by the existing utilities. Since there are few municipalities in the area which own their distribution systems such a method of disposing of the Authority's power would involve the acquisition by such municipalities of the distribution facilities now owned by the utilities or the construction of competing facilities. The statute contemplates both the above methods [fol. 3403] of disposing of the Authority's power; that is, sale to the existing utilities and invasion of the field now occupied by the utilities, but the primary method is distribution to and through public agencies.

(C) President Roosevelt has uttered publicly that one of the functions of operation of Muscle Shoals is a “yard-

COMPLAINANTS' EXHIBIT No. 708 (Excluded).

stick" by which to measure the reasonableness of the electric rate charges. In view of his sponsorship of this legislation the yardstick idea must be taken to be definitely a part of the policy embodied in the Tennessee Valley Authority Act.

(D) The Authority would violate the purposes and policies laid down for its direction if it were to sell its entire output to privately owned utilities, even if such corporations were ready and willing to make such a purchase at a figure favorable to the Authority. The Authority must consider the sale of electricity to non-profit agencies as a preliminary obligation and within reasonable limitations hold its power resources available for purchase by such agencies which can be feasibly and economically served. [fol. 3404] For the Authority's operations to provide a yardstick of public operation by which to measure private operations it is essential that the Authority engage not only in the generation but participate in the transmission and distribution of electricity, since these latter two phases of electric service represent the most important part of the cost of such service. A public yardstick to have value necessarily means public operation from power house to consumer's premises. (It is for this reason that the Authority has adopted a policy of rate and accounting control of municipal distribution operations.)

(E) Contracts with private utilities for sale of current is definitely contemplated by the law, subject only to the policy of giving preference to public agencies. The following are possible alternatives which might serve as the basis for negotiations with private utilities:

(Alternatives)

"1. Sale of entire output of the Authority to the private [fol. 3405] utility, subject to restrictions as to the resale price in accordance with section 12 of the Act.

2. An agreement with the private utilities binding the Authority to confine its power operations within a certain definite territory.

3. The most feasible alternative basis for negotiation consistent with our conclusions as to the law and the yard-

COMPLAINANTS' EXHIBIT No. 708 (Excluded).

stick policy, which we conceive to be part of the law, would be something along the following line:

The Authority would proceed to enter into contracts with municipalities owning or about to own their distribution systems in the area immediately around Muscle Shoals and in the northeast Mississippi territory. This supplies some public operation and in a measure meets the yardstick policy.

Surplus power not needed in the aforesaid areas should be sold to the private power companies at a remunerative rate to the Authority under a co-operative arrangement whereby the Authority will attempt to secure from Congress funds with which to finance large-scale purchasing [fol. 3406] and distribution of heavy use electrical appliances, notably ranges, refrigerators and hot water heaters. The Authority will seek to be authorized by Congress to provide for the sale of these appliances to any customers directly served by the Authority, or indirectly served by the Authority, that is to say, customers on the distribution system of private utilities which are purchasing the Authority's power at wholesale. This arrangement will furnish an inducement and a consideration to the private power companies for the purchase of our surplus power. In such an arrangement it should be provided that the resale price fixed by any private power company on whose system Authority power is being conducted and utilized should carry a very low rate at the end of the schedule which will encourage and make feasible the use of the heavy appliances, the financing of which is provided for under this co-operative arrangement. It is almost certain that as a condition of any such arrangement the power companies will desire some kind of assurance that the Authority will not serve [fol. 3407] at wholesale the municipalities which do not now own their distribution systems, the point being that the principal fear of the utility is that the distribution systems which they now own will be acquired or that they will be subject to competition in the distribution end of the business. Such an agreement the Authority cannot make for the same reason set out as to an agreement to confine operations to a certain territory. If a municipality being served by a private company in whole or in part with power

COMPLAINANTS' EXHIBIT No. 708 (Excluded).

supplied at wholesale by the Authority and within the purview of this co-operative arrangement as to appliances determines to acquire its distribution system and applies to the Authority directly for a supply of electricity, the present state of the law, in my judgment, would not permit the Authority to reject such application if in other respects a feasible and economical arrangement were proposed.

4. The Authority could urge that a substantial area now served by private utilities be transferred to public agencies. That is to say, that in the area, for example, in a strip of [fol 3408] perhaps fifty miles in width between Muscle Shoals and Norris Dam, that it be definitely determined that electricity shall be furnished to the consumers through public agencies, principally municipalities. This would be an important accomplishment of the yardstick theory. It would necessitate the Authority going to Congress for a large appropriation with which to assist in the financing of municipalities for the acquisition by them of their distribution systems. Obviously, the power companies would not be interested in this proposal unless they were given assurance that their properties would be purchased and not merely that the Government would finance competing systems which would leave them with their property on their hands. Some measure of protection against unreasonable acquisition prices would have to be provided. In order to take care of the existing generating facilities of private utilities, provision would have to be made either for the Authority to buy a part or all of their output or to buy the facilities themselves.

[fol. 3409] 5. Another possible alternative would be an agreement with the power companies to accept as compensation for the distribution systems in such area the bonds of the respective municipalities. Such a measure, however, has this difficulty, namely, that the municipalities generally are not in position to issue general obligations. If they issue liens against the property a conflict of interests is produced which can be productive of much disharmony and operating difficulties.

6. A further alternative would be for the Authority to co-operate in working out some method of financing these ac-

COMPLAINANTS' EXHIBIT No. 708 (Excluded).

quisitions through private sources. The difficulty here is that for the Government to work on a co-operative basis with a private investment concern presents some difficult questions of policy and control. It virtually shifts for the time being control of the municipal systems from the governing bodies to a centralized financial organization which, under these circumstances, would exercise considerable power.

[fol. 3410] If none of these alternatives is acceptable to the Board or can form the basis for successful negotiations with companies, the Board is left to its present policy namely, of entertaining applications from any municipality within the areas described in the Authority's announced power policy, of building necessary transmission lines and other facilities to serve such applicants and to gradually build up an area of operations which, over a period of years if successful, will furnish a balanced load and insure the accomplishment of the yardstick objective. This could be, and it is desirable that it should be, combined with an arrangement with the power companies whereby they will continue to purchase as much power as we have available on the most advantageous basis that can be negotiated. At the present time the Authority's operation expenses are being met with some surplus out of the proceeds of the 2 mill contracts with the Alabama Power Company. Continuation of some kind of contract for the purchase and sale [fol. 3411] of power at wholesale to the Alabama Power Company is important to the Authority.

7. In pursuing the present practice of Authority of gradually working toward the building up of a separate system, it is almost inevitable that the availability of the Authority's power at fair rates will produce a market. Part of this market will be the outgrowth of agricultural experimentation projects which will spread to other areas not now served by any central station energy. Part of this growth will be through the establishment, for example, of electro chemical plants along the transmission system. In other words, the building up of a balanced load is not by any means wholly dependent upon our taking away of a market now served by the private companies. That is to say, it is not wholly dependent on the result of municipal elections and acquisitions."

[fol. 3412] COMPLAINANTS' EXHIBIT No. 709 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 547:

TVA Minutes, October 14, 1933

"The Chairman announced that President Roosevelt had ordered the Tennessee Valley Authority to proceed at once to construct General Joe Wheeler Dam (Dam No. 3), and to use its own funds for this purpose. The President will undertake to have Congress reimburse the Corporation at the next session.

The Chairman requested Authority to increase the engineering force and to employ John L. Savage, Sherman M. Woodward, Charles H. Paul, Charles H. Locher, and such other men as are needed to make preliminary investigations, prepare plans, and to begin construction of the General Joe Wheeler Dam. The Board approved the request."

[fol. 3413] COMPLAINANTS' EXHIBIT No. 710 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 551:

TVA Minutes, October 24, 1933

"David E. Lilienthal reported the results of his conference with the Commonwealth & Southern Corporation and stated that substantial progress was being made. It was his impression that the utility is tacitly recognizing that the Authority is definitely in the power business and that its purpose in being there is to develop a "yardstick" for measuring power costs.

The Authority's proposal to delimit an elliptical area for its power operations was not favorably received by the utility, Mr. Lilienthal reported, but the utility has agreed that municipalities which desire to obtain power from the Authority shall not be denied this privilege.

It was suggested that the Authority might start its power operations in a relatively small area and expand as conditions warrants since that power program of the Authority

COMPLAINANTS' EXHIBIT No. 710 (Excluded)

assumes that surplus power will be sold to power companies upon request, subject to recovery should such surplus power be required for the use of municipalities.

[fol. 3414] The suggestion was made that the Authority buy the Tennessee Electric Power Company. The advantages and disadvantages of such a purchase were discussed at length. Mr. Lilienthal pointed out that present excess power capacity should be considered and that existing distribution systems should not be duplicated.

David E. Lilienthal suggested that the Authority attempt to develop a technique for appraising power distribution systems.

Ways and means of acquiring the power company's property were discussed. Arthur E. Morgan suggested that purchase might be made by means of a bond issue. He pointed out the merits of the plan and said it would place the Board in the position of having taken advantage of every possible opportunity to carry out a sound power program.

The results of his conference with manufacturers of electrical appliances were described by David E. Lilienthal who stated that the companies were in complete accord with the policy of the Authority to increase domestic consumption of power through greater usage of electrical appliances. He expressed the opinion that the business of selling and installing electrical appliances could be put on a self-liquidating basis and that this aspect probably would meet with the approval of Congress, the Reconstruction Finance Corporation, and the Public Works Administration."

[fol. 3416] COMPLAINANTS' EXHIBIT No. 711 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 552:

TVA Minutes, October 24, 1933

The results of his conference with manufacturers of electrical appliances were described by David E. Lilienthal who stated that the companies were in complete accord with the policy of the Authority to increase domestic con-

COMPLAINANTS' EXHIBIT No. 721

The Tennessee Valley Authority is utilizing the nitrate properties at Muscle Shoals and is adding materially to the [fol. 3445] plant in the conduct of experiments seeking processes in the cheaper production and distribution of plant foods. This is very necessary in the rehabilitation of the land and in a permanent program of land ownership and rural development. In the preparation of phosphates, the program may require that part of the manufacturing process should be at the phosphate beds, either within or without the Tennessee Valley. The continuation of this research, together with demonstration of possible economics in actual production, distribution, and use on a commercial scale, is desirable.

Of the total area within the Tennessee River system, which has at one time been in cultivation, perhaps a quarter has been destroyed by soil erosion and that destructive process is now more active than ever. This soil erosion is also filling up and destroying the reservoirs of water-power systems. Unless it is checked, this great region and much greater areas in the Southern uplands will slip backward in material well-being. A program of land use planning has been instituted to determine the best use of the land, and [fol. 3446] the best manner of preventing its further destruction.

The forests of the region have been steadily destroyed by wasteful lumbering, by the common habit of setting fire to the woods each winter, and by the habit of clearing steep hillsides for the four or five corn crops that they will produce before the soil is washed away. The Tennessee Valley Authority has undertaken a program of devising and putting into operation a forest policy appropriate to this region, in cooperation with the United States Forest service and the several states of the Tennessee Valley area, and in harmony with regional planning of the Federal Government.

In the Tennessee Valley area there are many more people engaged in agriculture than are needed in that pursuit. As a part of the program of social and economic planning, studies and demonstrations are being undertaken for re-adjusting this population, with the encouragement of local industries especially for home consumption and resettlement of families displaced by the establishment of national forests, the construction of reservoirs, or

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by other causes. Studies are under way of economies and improvements in industrial and community organization, including cooperatives, in the use of natural resources of the region, and of the relation of agriculture to industry, with appropriate experiments and demonstrations. One of the aims is to prevent a recurrence of the congestion of people from those rural areas in our industrial centers.

The transportation system of the region, by rail, highway, water and air, has never been coordinated as to service or rates. A regional study is planned of the transportation rates, facilities, and needs of the Tennessee Valley, in cooperation with other Federal agencies, and the local agencies as a guide to a transportation policy for this region and as an example to other regions.

In cooperation with the educational, health, highway, public safety, and other authorities of the Federal Government, and of the states of the Tennessee Valley area, the Authority has undertaken to promote common understanding and common effort to work out solutions to the common problems of the region. These efforts to bring about cooperation should continue.

If these and similar problems of social and economic organization can be successfully solved in this limited region, the methods and results developed will be of great value to the rest of the United States.

Respectfully, Arthur E. Morgan, Chairman of the Board.

[fol. 3449] COMPLAINANTS' EXHIBITS No. 722 to 769, Inclusive

There are no such Exhibit numbers.

[fol. 3450] COMPLAINANTS' EXHIBIT No. 770 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 661:

Synopsis of Letter from Henry T. Hunt, Chairman of Electric Power Board of Review, to Mr. Lilienthal, November 17, 1934, and Letter from Mr. Lilienthal to Mr. Hunt, November 22, 1934

"In reply to this interrogatory, as to correspondence between TVA and the office of Federal Emergency Admin-

COMPLAINANTS' EXHIBIT No. 711 (Excluded)

sumption of power through greater usage of electrical appliances. He expressed the opinion that the business of selling and installing electrical appliances could be put on a self-liquidating basis and that this aspect probably would meet with the approval of Congress, the Reconstruction Finance Corporation, and the Public Works Administration.

A memorandum dated October 20, 1933, titled, "A proposed cooperative program between the Tennessee Valley Authority and the manufacturers of electrical equipment," was submitted by David E. Lilienthal who said that the proposed program had been presented to the manufacturers of electrical appliances. A true copy of the memorandum, labeled exhibit 10-24-33-a, is attached to these minutes and made a part hereof.

David E. Lilienthal recommended that the Authority proceed with its power plans for the three cities at Muscle [fol. 3417] Shoals and the Northeastern Mississippi area; that negotiations to supply power to towns along the projected transmission line between Wilson Dam and Norris Dam be continued; and that the Authority attempt to develop additional uses for power.

Arthur E. Morgan suggested the electrification of a railway at Asheville, North Carolina, as a possible power outlet for the Authority. He also mentioned as a possibility for increasing power usage the development of some 400 deposits of manganese ore in the valley region.

The general conclusion of the Board was that conferences with power companies should not be discontinued as long as there is evidence of good faith in the negotiations; that conferences regarding the distribution of electrical appliances to encourage the use of electric power should proceed; that there should be a continuation of effort toward working out an arrangement for delimiting power areas; and that further consideration should be given to the proposal to purchase the Tennessee Electric Power Company's property.

[fol. 3418] It was decided that Mr. Lilienthal should confer with Senator Norris and get his views on the power projects and negotiations pending."

[fol. 3419] COMPLAINANTS' EXHIBIT No. 712 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 554:

TVA Minutes, November 27, 1933

"David E. Lilienthal reported that he is attempting to work out a comprehensive plan with the cooperation of the Commonwealth & Southern Corporation which will enable the Authority to set up an area for its power operations, and in which its relations with the private utilities will be comparable to the relations which might exist between two privately-owned utilities operating in the same area. He stated that he would like to integrate the existing facilities but not in any way relinquish any of the rights that the Authority is trying to establish in connection with its experimental power project.

He pointed out that through agreements covering the use of rights-of-way and the interchange of facilities, the Authority can cut down its power construction budget tremendously because the program of constructing costly transmission lines can be delayed until the Authority is in a position to see clearly the character of its objectives and determine the quality of the obstacles which confront its efforts.

[fol. 3420] In accordance with Mr. Lilienthal's suggestion, the Board adopted the policy of holding up actual construction of transmission lines, except those being constructed in rural districts by labor provided by the Civil Work Administration until January 1, 1934, so that the results which will accrue from the operation of the program now being prepared can be observed. The planning, drafting, and specification work is to proceed inasmuch as the results of this effort can be used elsewhere.

The Board approved Mr. Lilienthal's work and authorized him to continue his negotiations with the utility as outlined and to report the results of his conferences to the Board.

Mr. Lilienthal stated that he had been convinced since he had conferred with the Electrical Manufacturers Association on the project of making and distributing low cost domestic electrical equipment of good quality, that the policy for the Authority to follow is to contact all manu-

COMPLAINANTS' EXHIBIT No. 712 (Excluded)

facturers of electrical appliances in order to get the benefit [fol. 3421] of competition on prices. One advantage would be that the most aggressive and most imaginative manufacturer would be the one to set the price and quality rather than the duller and least ambitious of the group."

[fol. 3422] COMPLAINANTS' EXHIBIT No. 713 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 557:

TVA Minutes, December 16, 1933

"The Board discussed the Aurora Landing Dam project, and reached the conclusion that it would not be advisable to have the dam financed and built by private parties, inasmuch as such an arrangement would interfere with unified control of the water power development of the Tennessee River system.

The Board decided not to make at this time a survey of the flood control problem affecting the city of Chattanooga, as requested."

[fol. 3423] COMPLAINANTS' EXHIBIT No. 714 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 557:

TVA Minutes, January 19, 1934

"The Board considered the desirability of establishing the complete control and jurisdiction over all power sites in the Tennessee Valley area so that the power resources of the Valley can be developed in an orderly, systematic, and efficient manner. Messrs. Bock, Snyder and Swidler were instructed to study the problem and make recommendations to the Board.

A request received from the Lord Construction Company asking permission to proceed with the construction of a proposed steam power development located about one hundred (100) miles east of Asheville, North Carolina, was referred to Mr. Lilienthal for reply."

[fol. 3424] COMPLAINANTS' EXHIBIT No. 715 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer
(Transcript of Record in the case of TVA, et al., v. Ash-
wander, et al.) page 557:

TVA Minutes, March 30, 1934

The minutes of this meeting approved a project entitled
"Tennessee Valley Section of the National Plan." This
project contained the following provisions:

"Purpose of Project:" To prepare a comprehensive
regional plan of the entire Tennessee River basin, as a guide
and coordinator of public and private developments now
under way or in prospect.

"Personnel Required:" Staff of 30 to be built up dur-
ing the remainder of February, March and April, together
with consultants as needed.

"Appropriation Required: (From 1934-5^o budget, sub-
mitted February 15, 1934—division of land planning and
housing, regional planning section).

Personal services—project R. P. 1.....	\$30,769.50
Other obligations (Supplies, Communications, travel, etc.—Share of \$13,500 total shown in budget)	\$ 4,000.00
Administrative Expense—(Share in administra- tive expense of Regional Planning Section and of Land Planning Division)	\$ 4,000.00
Total — to June 30, 1934	\$38,769.50

[fol. 3425] Time Required for Completion: Remainder of
fiscal year, 1934, continuing through 1935 in expanded
form, for completion of major portion of plan by June, 1935.
Work to go on thereafter as continuation project with re-
duced staff.

Cooperation: All Divisions. This is essentially a proj-
ect for the coordination of all TVA and outside activities af-
fecting land development. It will depend, for factual ma-
terial and recommendations, on all Divisions engaged in
development work, as well as on Federal, State and local
agencies.

Need of Project: The Tennessee Valley is not waiting
for a plan—its development is constantly going on and the

COMPLAINANTS' EXHIBIT No. 715 (Excluded)

pace is daily quickening. During the next few years miles of new pavement will be laid that will later be abandoned, expensive bridges, schools and homes will be built below the level of future lakes, settlers will start farms on land that shortly will be incorporated in public parks and forests, transmission lines will be built to serve areas that will be [fol. 3426] depopulated, mistakes by the hundred will be made, costly mistakes and damaging mistakes,—unless 'here is a comprehensive plan against which individual developments can be checked in advance.

The Authority is embarking on a hydro-electric program which will completely change the physical structure of large sections of the Valley, and will affect every part of it. Extensive rearrangement of the highway system and of railroad lines will be required. Other parts of the program, coupled with the operations of other Federal agencies will alter established modes of living, change farming methods and industrial operations, make substantial changes in the ownership and use of lands, and cause major shifts in population.

The result of all these forces acting in the Valley will be utter confusion unless there is prepared a master plan through which they may all be coordinated and directed toward a common objective. The entire program of the Authority will be brought to naught and the huge public and private investments in the Valley jeopardized if the establishment of such a plan is too long delayed. Its preparation is a long and careful process, it cannot be completed overnight. It will require extensive study, wide collaboration, and much reshaping and adjustment after it is put in preliminary form. An early beginning is therefore imperative.

It is to develop the skeleton of such a plan that this Project is set up. Every part of the Valley program, whether it is physical or social or economic or political, public or private, relates in some way to the arrangement and use of land, and through its relation to the land is brought into relationship with every other part. Land planning is the coordinator between the physical construction of dams and roads, the economic effect of cheap power and fertilizer, and the social composition of the region. Through the planning of the physical development of the Valley, the other essen-

COMPLAINANTS' EXHIBIT No. 715 (Excluded)

tial elements of planning are brought together and given comparable expression.

A comprehensive plan presented graphically will bring [fol. 3428] out instantly any conflicts that may exist between highway and reservoir proposals and lead to their correction before expensive construction is undertaken. It will show the relationship of proposed centers of agricultural or industrial production to their urban markets, the avenues for transportation of their products, their place in the power transmission system. Map presentation will show at a glance the bearing on county consolidations of physical barriers, routes of communication and population centers. It will show the relative amounts of land and relative position of areas classed as crop or grazing land, forests or sub-marginal areas, and relate them to centers of population, mineral resources, transportation and all the other elements of the Valley life. Map presentation of physical conditions and proposals frequently discloses economic opportunities arising from the juxtaposition of factors whose relationship would otherwise be missed.

As a protection to the Authority itself against costly [fol. 3429] mistakes; as an aid to intelligent coordinated planning of the Valley life; and as a guide for those myriad private and public developments in progress throughout the Valley at all times, a master plan of the whole Valley area is urgently needed, and the Division of Land Planning and Housing, herewith requests Authority to commence its preparation.

The type of personnel required for this work will not be readily found, and it will probably be some time before an adequate and qualified staff can be selected and brought together. For this reason at least preliminary authorization will be required several weeks before the project itself can be inaugurated. The emphasis of all branches of the President's program on planning has already brought into Government service the majority of those proficient in the planning field. There are few, if any, of those qualified for a responsible part in the preparation of a Valley plan who are in need of employment. The result is that this Division will have to offer salaries in excess of those received in other professions where the number of men available is greater or the current demand less, and it will have to offer an

COMPLAINANTS' EXHIBIT No. 715 (Excluded)

[fol. 3430] opportunity for constructive service and a degree of permanency at least as great or greater than is now offered in other planning activities of the Government. It is believed that the salary schedules set up in the budget for this project are sufficient to attract the type of men required if reasonable permanency can be assured."

[fol. 3431] COMPLAINANTS' EXHIBIT No. 716 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 563:

TVA Minutes, April 13, 1934

At the meeting of the Board of Directors of Tennessee Valley Authority held on April 13, 1934, there was approved a project designated "Tennessee Valley Authority project authorization request," to the following effect:

"From Llewellyn Evans, Chief Engineer, dated March 27, 1934, Project Title, Acquisition of power Distribution Facilities to serve the City of Athens and Limestone County, Alabama. Purpose, purchase of properties from Alabama Power Company to serve Athens, Alabama, and Limestone County, covered in contract negotiated with the above company January 4, 1934. Procedure, Legal Department to Examine Title of all Property involved as described on page 3 of this request, and Treasury Department be authorized to make payment for property transferred thus acquiring title in the name of the Tennessee Valley Authority after engineering division has made suitable inventory. Estimated cost, \$177,396.52. Recommendations, briefly this project consists of completing a portion of the contract entered into [fol. 3432] January 4, 1934, between the Tennessee Valley Authority and the Commonwealth & Southern Corporation to purchase properties owned and operated by the Alabama Power Company in Limestone County, Alabama. The properties to be taken over as described in exhibit B of the Commonwealth & Southern contract as follows:

Page 2 of exhibit B: Approximately 14½ miles of 44,000 volt transmission line from Athens to Belle Mina.

Sheet 4 of exhibit B: Belle Mina central substation, consisting of three 150 kva transformers with one outgoing

COMPLAINANTS' EXHIBIT No. 716 (Excluded)

unregulated circuit and the Athens district substation consisting of four 1,000 kva transformers 44,000 to 11,000 volts supplying three outgoing unregulated circuits.

Sheet 5 of exhibit B: Item 10, which lists all of the rural lines in Limestone County.

Sheet 6 of exhibit B: Items 8 and 10, describing the Belle Mina distribution and the Athens distribution.

[fol. 3433] It might be well at this point to discuss properties, described on sheet 6 of exhibit B, since this property is not included in the \$1,000,000 mentioned in paragraph 2 of the Commonwealth & Southern contract. Without item No. 10, exhibit B, sheet 6, will be unable to serve the city of Athens and by acquiring the property listed in this item as well as item 8, we will acquire all power facilities in Limestone County. The City of Athens being a municipally owned distribution system, will be able to supply all of the service required within the corporate limits. The Tennessee Valley Authority can organize the remaining rural territory consisting of Belle Mina, Capshaw, Tanner, Ardmore and Elkmont in a rural power district administered by the present personnel of the Alabama Power Company at Athens, or personnel that we may see fit to substitute in place of them and thus operate this rural section until such time as a reasonable rural cooperative organization may be formed to take over the operation of this territory.

There might be some hitch in the acquisition of the properties listed on sheet 6 of exhibit B, due to the fact that this [fol. 3434] property is not included in paragraph 2 of the contract, but we are sure the power company would prefer to accept our money for a definite sale rather than risk the chance of these facilities being duplicated by the communities themselves."

[fol. 3435] COMPLAINANTS' EXHIBIT No. 717 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 564:

TVA Minutes, June 30, 1934

David E. Lilienthal described to the Board the status of negotiations with the Alabama Power Company and sub-

COMPLAINANTS' EXHIBIT No. 717 (Excluded)

mitted recommendations concerning the acquisition of electric distribution properties in Northern Alabama. The Board unanimously adopted his recommendations which are contained in exhibit 6-3-34-b, a true copy of which is attached to these minutes and made a part hereof.

The recommendations referred to were as follows:

"To: The Board of Directors.

From: David E. Lilienthal.

Date: June 30, 1934.

Subject: Recommendations to the Board for acquiring distribution properties in Northern Alabama.

"It is proposed that the Authority shall immediately acquire from the Alabama Power Company distribution properties in Northern Alabama to be operated under the following plan.

1. Properties shall be purchased for the lump sum of \$1,000,000.00, and retained by TVA for an interim period of direct operation during which additional rural lines will be [fol. 3436] constructed and the urban properties rehabilitated and improved. The rates to be charged shall be the basic TVA rates plus a surcharge of 10 per cent to be applied to all classes of customers. This surcharge is required in order that the capital investment may be returned to the TVA within 10 years. If no surcharges were imposed, it would require from 15 to 25 years to retire the investment.

2. At the expiration of the interim period, which may be from six months to several years as the Authority may determine, the properties will be reconveyed to local municipalities, county associations, or other local organizations, upon terms and conditions outlined in the attached "Plan for Distribution of TVA Electricity in North Alabama."

3. During the period of operation, the accounts will be carefully kept and all profits from operations and income from surcharges will be applied toward the reduction in purchase price offered to the local organizations.

4. It is understood that the plan will not be operative [fol. 3437] unless and until definite and satisfactory commitments have been made by local organizations expressing

COMPLAINANTS' EXHIBIT No. 717 (Excluded)

their willingness to assume responsibility and control of local distribution systems at a later date.

5. The proposed plan will permit the Authority to increase its power market almost immediately. It will prevent duplication of existing systems by municipalities now contemplating construction with PWA funds. It will make possible the throwing together of rural and urban electric systems and the development of economic load areas.

6. Figures on evaluation and earning power justifying the option price of \$1,000,000 which TVA has obtained from the Commonwealth and Southern are given in a memorandum entitled "Program for Acquisition of Distribution Properties in Northern Alabama."

[fol. 3438] COMPLAINANTS' EXHIBIT No. 718 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 566:

TVA Minutes, July 17, 1934

"The Board approved David E. Lilienthal's acceptance of President Roosevelt's invitation to serve on the National Power Policy Committee whose function it will be to work out a plan to unify the power resources of the country and to develop a national policy designed to make an abundant supply of power available to the consumer at reasonable rates."

[fol. 3439] COMPLAINANTS' EXHIBIT No. 719 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 570:

TVA Minutes, August 7, 1934

"The Board considered the proposed budget covering the Authority's operations for the fiscal year ending June 30, 1935, copies of which the Board members had previously studied individually. After spending two days analyzing, discussing and revising the various items in the proposed

COMPLAINANTS' EXHIBIT No. 719 (Excluded)

project, the Board unanimously adopted the following Resolution:

The budget referred to above contained under caption 'Electricity Program for the Fiscal Year Ending June 30, 1935,' an item of \$100,000 entitled 'Sales Promotion—EHFA'; also, 'Sales Promotion-Chattanooga Merchants Display'; also 'Sales Promotion Electric Kitchen.' This budget also included the following items: For the fiscal year stated \$270,490 for engineering and general data and land acquisition (dam) for Hiwassee Dam and included certain supporting statements; set out on pages 4 and 5 thereof. The budget also included similar items for the French Broad Dam and included design studies 'which will ultimately lead [fol. 3440] to the final project plans and working drawings from which dams, power houses and other structures will be built.' Also like items for Aurora Dam with like supporting statements.

[fol. 3441] COMPLAINANTS' EXHIBIT No. 720 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 571:

TVA Minutes, September 18, 1934

"David E. Lilienthal reported to the Board that he had conferred with representatives of the City of Memphis with regard to supplying the City with power. He described the present status of negotiations."

[fol. 3442] COMPLAINANTS' EXHIBIT No. 721

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 575:

Report of Arthur E. Morgan to the President on the Activities of the Tennessee Valley Authority

"The President, The White House, Washington, D. C.

MY DEAR MR. PRESIDENT:

"The Tennessee Valley Authority has been operating for approximately ten months. In that period rapid progress

COMPLAINANTS' EXHIBIT No. 721

has been made in the construction of Norris Dam as well as in the other features of the program. The Authority has taken over the operation of the Muscle Shoals power plant, and by construction and purchase is acquiring a distribution system which should absorb all of the electric power now available at the plant. Arrangements are now being made for the sale of this power, including the development of rural electrification. A corporation known as the "Electric Home and Farm Authority" has been organized [fol. 3443] to stimulate the use of electric appliances and the consumption of electric power.

Last October you asked the Authority to start construction on Joe Wheeler Dam as a means of providing additional employment. Work was begun immediately. In view of the rapid development of the power program, the need for this additional power may materialize sooner than was expected.

In the past our water resources developments have merely been in separate, uncoordinated units. The development and utilization of the water resources of the Tennessee River system in accordance with a single unified plan by a single public Authority, as contemplated in the Tennessee Valley Authority Act of 1933, makes possible great increase in use and very great economics of expenditure. I therefore am pleased to report the beginning of such development and control of the Tennessee River and its tributaries for navigation, flood control, power development, and other uses, except for the operation of navigation facilities, under [fol. 3444] the administration of the Tennessee Valley Authority, and the unified development of that river system by this Government agency as a national policy. Provision should be made at present for continuing the construction of the Joe Wheeler Dam, and for beginning work on about four other dams on the Tennessee River or its branches.

The power program of the Authority, in promoting the wider and better use of electricity for the Tennessee Valley and for the nation, its program of encouraging rural electrification, and the design and distribution of low-cost electrical appliances, is a stimulus to the manufacturer of appliances, to both publicly owned and privately owned utilities, and the larger and better use of electric power by the whole people. That program should be continued and extended.

COMPLAINANTS' EXHIBIT No. 770 (Excluded)

istration of Public Works, relating to loans to municipalities in Alabama for the purpose of constructing electric utility systems, TVA set out a letter dated November 17, 1934, from Henry T. Hunt, Chairman of Electric Power Board of Review (Federal Emergency Administration of Public Works) to the defendant David E. Lilienthal, Director and General Counsel of TVA, asking to be advised as to the developments in the matter of TVA's option to purchase Alabama Power Company's properties, and requesting a list of the towns, and to be advised "how this and other recent developments will affect the attitude of TVA towards applications now before PWA for electric projects in the area."

The following was the reply of TVA, by David E. [fol. 3451] Lilienthal:

Knoxville, Tennessee,
November 22, 1934.

Hon. Henry T. Hunt, Chairman, Electric Power Board of Review, Federal Emergency Administration of Public Works, Washington, D. C.

DEAR MR. HUNT:

I have your letter of November 17, regarding the 14 north Alabama towns. A list of the towns follows:

Courtland
Decatur
Falkville
Florence
Hartselle
Leighton
Moulton

Red Bay
Sheffield
Town Creek
Tuscumbia
Cherokee
Russellville
Rogersville

As to the TVA's attitude toward applications now before PWA for electric projects in this area: If the transfer of these properties by purchase can be effected in the reasonably near future, then it is the expressed position of these [fol. 3452] communities, as our records indicate, that PWA loans will not be utilized to carry out the mandate of their electorate for the acquisition of a distribution system. If, however, the purchase transaction is blocked and indefinitely delayed by tactics which has been heretofore em-

COMPLAINANTS' EXHIBIT No. 770 (Excluded)

ployed, then it may well be that the communities will not desire to wait indefinitely but will take the position that they desire to construct their own distribution systems.

We will advise you promptly as to developments in this proceeding. The Alabama Commission has taken under advisement the matter of approving the sale by Alabama Power Company to TVA. The other day Judge Grubb of the Federal Court denied a temporary injunction against the transfer petitioned for by certain stockholders of the Alabama Power Company. I will keep you advised of developments.

Very truly yours, Tennessee Valley Authority by
David E. Lilienthal, Director and General Counsel.

[fol. 3453] COMPLAINANTS' EXHIBIT No. 771 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 662:

Synopsis, Telegram, W. L. Farr, Mayor of Tuscumbia,
Alabama, June 19, 1934

On June 19, 1934, W. L. Farr, Mayor of Tuscumbia, Alabama, wired Lilienthal advising that the Carmichael Act had been declared valid by the Supreme Court and asking: "May we expect you to negotiate purchase existing distribution system or shall we proceed with application for loan from WPA?"

[fol. 3454] COMPLAINANTS' EXHIBIT No. 772 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 663:

Telegrams, David E. Lilienthal to Mayor W. L. Farr,
June 20, 1934

"Dated Knoxville, Tennessee,
June 20, 1934.

MAYOR W. L. FARR, Tuscumbia, Alabama:

"Replying your wire in which you inquire if TVA will negotiate purchase existing distribution system or whether

COMPLAINANTS' EXHIBIT No. 772 (Excluded)

City should proceed with application for loan from PWA. For several months TVA actively considering purchase existing distribution systems in Northern Alabama such cities later to repurchase from TVA systems including rural without issuance of bonds and solely out of electric revenues. This program was intended to eliminate delays and uncertainties involved in PWA situation and obviate duplication of distribution systems and expensive competition. Negotiations with Alabama Power Company for option on distribution facilities throughout Northern Alabama by TVA thus far unsuccessful because we find price fixed by company in excess reasonable value of property [fol. 3455] considering depreciation. Due to this failure of negotiations undersigned conferred June thirteenth with Administrator Ickes and General Counsel Hunt of PWA. Expect further work from PWA June twenty first. Regard inability to buy existing facilities most unfortunate but see no alternative for cities but to press PWA applications. Unless pressure occasioned by passage additional appropriation prevents desire to spend several days conferring with you and other responsible parties in Northern Alabama early as possible. Your fine assurance of cooperation in advancement of entire Valley deeply appreciated.

David E. Lilienthal."

[fol. 3456] COMPLAINANTS' EXHIBIT No. 773 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 664:

Synopsis of Correspondence Between PWA and TVA
Reallotment to Hartselle

Correspondence was also produced between the Federal Emergency Administration of Public Works and TVA inquiring whether TVA could serve the City of Hartselle in the event that a PWA allotment should be made to Hartselle for the construction of a distribution system. The letter discusses the question whether the Alabama Power Company should be compelled to serve the proposed mu-

COMPLAINANTS' EXHIBIT No. 773 (Excluded)

nicipal distribution system, and concluded, "however, if TVA can supply the City with power upon completion of the project it will not be necessary for us to go into this question." TVA replied under date December 28th, 1934 that "TVA can supply the City of Hartselle with power upon completion of the project which it now has under way."

[fol. 3457] COMPLAINANTS' EXHIBIT No. 774 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 664:

Budgetary Statement—"Estimate of Appropriations, Fiscal Year Ending June 30, 1936) and the Justification, Relating to the Electricity Program

13. In answer to this interrogatory, requesting TVA to attach a copy of its operating budget, its budget for capital expenditures, a statement of its operating revenues and expenses, and as to the — amounts set aside for construction of generating plants, transmission lines and distribution systems, the TVA set out in its answers a report entitled "Estimate of appropriations fiscal year ending June 30, 1936 (revised November, 1934)."

This document is set out in full in the Appendix.

The document is prefaced by a statement entitled "Justification, Tennessee Valley Authority Budgetary Request," stating that the general purposes of the Tennessee Valley Authority are as follows:

1. Unified development and control of the water resources of the Tennessee River and its tributaries through the construction of dams to provide navigation control floods, and produce power.

[fol. 3458] 2. Utilization of the power resources as a yardstick in determining the relative costs of public and private power operation, and distribution of this power to the greatest number of people.

3. Experimentation to lower the cost of production, distribution and application of the major elements of plant food.

COMPLAINANTS' EXHIBIT No. 774 (Excluded)

4. National planning for a complete river watershed, including erosion control, afforestation, the further use of mineral resources, the promotion and coordination of industry and agriculture, surveys and plans for the proper use of land, and the general social and economic well-being of the Valley.

This "justification" thereupon proceeded to describe the progress of the work under construction on Norris and Wheeler Dams, and included the following statements:

"A power policy has been formulated. Wholesale and retail rates have been fixed. The nucleus of a TVA power system has been established through the purchase of transmission and distribution facilities. One hundred miles of [fol. 3459] rural lines have been constructed. Arrangements have been made to serve more than 50 municipalities and private power companies have been stimulated to substantial rate reductions. Low cost electric appliances have been made available through regular retail dealers by the Electric Home and Farm Authority in cooperation with manufacturers. In Tupelo, the first city to use Muscle Shoals power, low rates and low cost appliances have increased the use of electricity one hundred per cent over last year. Similar increase is in evidence elsewhere.

"The budget request for 1936 provides for the continuation of the above program. Norris and Wheeler Dams will be completed. Two additional dams are proposed as navigation and flood control projects, and as a means of providing additional employment. Electrical properties acquired or constructed in 1935 will be operated and will provide additional revenues. Further steps will be taken to round out the electrical system and to increase the use of electricity."

The budgetary request or estimate contained a summary of all its programs, divided into Water Control, Electricity, [fol. 3460] Fertilizer, Regional Development, Administrative in General, Service Activities, aggregating for 1936 \$57,169,954; for 1935, \$67,550,023; and for 1934, \$12,365,175.

Under Water Control were listed Norris, Wheeler and Pickwick Landing Dams, and an undesignated "tributary dam or dams" and "main river dam."

COMPLAINANTS' EXHIBIT No. 774 (Excluded)

The Electricity program for 1936 is subdivided into Planning and Development, Administrative and Equipment, Engineering and Design, operation of power plants (\$608,000), Mississippi Division operation, Alabama Division operation, Tennessee Division operation, and construction and/or acquisition (\$13,211,400). This summary indicated revenues for 1936 from the operation of the electricity program of \$4,600,000. The summary set out the expected cost of operating the respective steam and hydro plants, and indicated the revenue to be expected from wholesale sales, indicated \$770,000 of revenue expected from the Mississippi Division, \$800,000 from the Alabama Division, and \$2,630,000 from the Tennessee Division.

[fol. 3461] Under the sub-division Construction and/or acquisition under the Electricity Program, the estimate indicated that . . . items of classifications of expenditure, including transmission lines, substations, power plants and facilities to serve tributary dam, service connections with industries, increasing the generator capacity at Wilson Dam, high tension circuit and equipment, transformers, new rural lines in Mississippi, service extensions and connections, voltage regulators, rural lines in Alabama and Tennessee, the purchase of properties of Tennessee Public Service Company, of Tennessee Electric Power Company, Alabama Power Company, new service extensions and connections, communication circuits, interconnection circuits, the construction of a 110 kv. line from Wilson Dam to Tupelo, industrial lines and extensions in Alabama and Tennessee, miscellaneous high tension lines and substations (\$4,250,000), and concluded with the following items:

"Purchase of Additional Transmission System, \$5,017,000."

[fol. 3462] Under the estimate for the Fertilizer Program were included \$1,940,000 for the operation of an electric fertilizer plant, construction of additional furnaces, etc., aggregating \$4,010,000 for 1936; and indicated expected revenues from fertilizer operations of \$1,340,000.

Under the item Administrative Equipment is included, among others, "Sales Promotion, \$100,888 (1935)."

COMPLAINANTS' EXHIBIT No. 774 (Excluded)

Under the heading Regional Development Program were included \$1,500,000. Under the caption "Industry, \$805,000; under agriculture, \$300,000; under Social and Economics, — and \$2,200,000 under Norris area development, etc. This \$1,500,000 of industrial development included for the year 1936, \$700,000 for research, \$180,000 for surveys and promotion of industries, \$50,000 for industries and power market studies, etc.

The estimate contained the break-down under the respective headings Engineering, Planning and Geology, For- [fol. 3463] estry, Social and Economic, and Land Planning, including among others, \$100,000 for research in social studies, and archaeological survey, planning mountain regions, etc. The summary also included \$40,000 of indicated expenditure under the heading "Materials and services to EHFA and others."

[fol. 3464] COMPLAINANTS' EXHIBIT No. 775 (Excluded).

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 669:

TVA Answers Respecting Its Corporate Functions.

28. In answer to interrogatories as to its corporate functions, TVA set out its departmental organization. The Electric Department indicated a steam power generation division, hydraulic power generation, internal combustion generation, transmission, distribution (city and rural), utilization, commercial, new business, and general office. The statement set out the production expense by plants, breaking them down into hydro-electric plants, steam plants, and internal combustion plants.

Among the activities scheduled under the Industrial Division were shown to be 44 employees, and were included the following captions:

"Number of Representatives of Industrial Companies canvassed with a view to locating plants in the Tennessee Valley."

COMPLAINANTS' EXHIBIT No. 775 (Excluded).

"Number of Companies which have established branches in the South or moved to the Tennessee Valley as a result [fol. 3465] of representations made by TVA Industrial Division employees."

In the analysis of the production cost of electric plants, division is made between production for commercial use and non-commercial use, and the figures are set out for the operation of the steam stand-by plant at Tupelo, Mississippi, having a plant generating capacity of 3,500 kw.

[fol. 3466] COMPLAINANTS' EXHIBIT No. 776 (Excluded).

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 683:

Stipulation as to Testimony of Harold L. Ickes.

"The parties to the above styled cause, acting by and through their respective solicitors of record, do hereby stipulate and agree that if his testimony had been taken in this case, Harold L. Ickes would have testified in substance as follows:

"That the telegram from him to Mayor Lee Glenn, Florence, Alabama, dated July 11, 1934, was sent after a conference with David E. Lilienthal.

"That prior to November 1, 1933, David E. Lilienthal conferred with the Administrator of Public Works, and that the Administrator expressed his willingness to consider in a co-operative manner applications for loans in the Tennessee Valley Area for municipal electric systems where towns had entered into contracts for power with Tennessee Valley Authority.

"That from time to time after January 4, 1934, consideration and action on applications for loans from Alabama towns in the area covered by that contract were affected by advice from the Tennessee Valley Authority as to the existing status of negotiations for the purchase of such [fol. 3467] properties. Within the last few weeks, at about the time of the letter of David E. Lilienthal to the Alabama

COMPLAINANTS' EXHIBIT No. 776 (Excluded).

Municipalities, consideration and action upon such application was expedited.

"That counsel for Tennessee Valley Authority appeared as amici curiae with counsel for the Public Works Administration in filing the brief in the Supreme Court of Alabama in the case of Oppenheim versus City of Florence in support of the validity of the proposed revenue bonds proposed to be issued by the City of Florence to PWA for the proposed PWA loan and grant to that town.

"That the reference in the Chattanooga Times of November 19, 1934, quoting Mr. Ickes as stating that the power companies have instituted suit and are using the money of the companies to go into Court with dummy lawsuits in an effort to stop the inevitable" is a correct quotation.

"That the Administrator of Public Works regards that part of the Tennessee Valley Authority program relating [fol. 3468] to the generation, transmission and sale of power as constituting a part of the general policy and program of the national administration."

Supplementing the stipulations as to the testimony of Harold L. Ickes, it was agreed that counsel for Plaintiffs might read in evidence the following letter addressed to him from Henry T. Hunt, Chairman of the Electric Power Board of Review:

"As to the action taken on a protest filed by Mr. A. C. Garber, Chairman, Alabama Power Company's Preferred Stockholders Protective Committee, I read the protest as chairman of the Electric Power Board of Review and concluded that all matters on which the protest was based had been considered by the Board. Accordingly, the protest was filed."

[fol. 3469] COMPLAINANTS' EXHIBIT No. 777 (Excluded).

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 686:

PWA Electric Power Board of Review Opinion re Decatur, Alabama.

Introduced in evidence as representative of the method of handling the Public Works Administration loans to the

COMPLAINANTS' EXHIBIT No. 777 (Excluded).

municipalities, and of the attitude of PWA with reference to such loans, were various proceedings relating to the loan of the City of Decatur, as follows:

"Whereas, the Electric Power Board of Review and the Deputy Administrator recommended that the project of the City of Decatur, Alabama, for the construction of an electrical distribution system, including the low side of the substation and equipment, to be included in the comprehensive program of Public Works for the reason, among others, that the Tennessee Valley Authority has acquired the necessary transmission lines to serve said distribution system and the financing of said project will aid said Authority in obtaining a market for its electrical energy:

"Resolved that said project be included in the comprehensive program and that the sum of \$350,000 (of which not [fol. 3470] to exceed \$100,000 shall be a grant) be allotted to finance the accomplishments thereof, subject to the execution of a contract satisfactory to the Administrator and in accord with the recommendations of the "Electric Power Board of Review" dated June 22, 1934, as amended by its report of July 30, 1934."

The recommendations of the Electric Power Board of Review, referred to in the above resolution, introduced as Plaintiff's Exhibit 28-A, was as follows:

"Subject: Application for loan and grant of the City of Decatur, Alabama, (Docket No. 6587) for the purpose of constructing distributing system, including low side of the substation and equipment, in the sum of \$371,743.

After review of the Docket, this Board finds:

"1. The engineering division by its supplemental report made the following conclusion and recommendation:

"It is our opinion that the proposed project is a public necessity and of social desirability; that it will afford needed employment, and that on the above assumptions it is technically and economically sound."

[fol. 3471] "The assumptions referred to are that.

(a) 'The municipal plant will receive, in addition to all the municipal load, 60 per cent of all other business in the

COMPLAINANTS' EXHIBIT No. 777 (Excluded).

first year of operation, and 80 per cent at the end of the loan interval.'

"This assumption, in the opinion of this Board, is far below that portion of the total business the municipality will receive, inasmuch as it will offer rates at least 60 per cent less than the present rates being charged by the Alabama Power Company by reason of the contract offered the City by the TVA; and as the Alabama Power Company, the competitor, cannot reduce its rates by anything like 60 per cent of its present rates by reason of its service to the City of Birmingham, and as it would be under the necessity of reducing its rates to other cities served by it in Alabama. If rates required by the TVA, contract are charged and the city obtains the same business the company now has, its income will provide for maintenance and operating costs, interest, amortization, and taxes, and a net income [fol. 3472] over all \$10,525. This appears by the estimate of O. M. Rau attached. This estimate makes no allowance for what may reasonably be expected in the way of increase of current sold and of income by reason of the heavy reduction of rates. That a reduction of rates produces larger net incomes is shown, among other examples, by the experience of the City of Washington, under its contract with the Potomac Electric Company covering the years 1925 to 1934. Under this contract the Company is required to apply one half its surplus to rate reduction. The maximum rate in 1924 was 10 cents per kwh. Rates are now, after successive reductions, 3.9 cents for the first 50 kwh., 3.3 cents for the next 50, 2 cents for the next 100 and 1.5 cents for all over 200. In 1924 the Company earned 3.4 times its bond interest after allowing for depreciation and taxes. In 1932 with rates cut to one-third it earned its interest twelve times. Earnings per share increased from \$26.90 in 1924 to [fol. 3473] \$68.08 in 1932. The privately owned electric company in Hartford, Connecticut, has had a like experience. Hence this Board finds that the assumption of the Engineering Division on which it bases its conclusion that the project is technically and economically sound is far less favorable to the City than the facts warrant.

The same finding applies to the estimate of Mr. O. M. Rau. This Board is of opinion that during the first year after the City begins business it will have at least 75 per

COMPLAINANTS' EXHIBIT No. 777 (Excluded).

cent of the business measured in dollars, and an increase of not less than 10 per cent in each succeeding year. Accordingly it finds that the project is technically, economically and financially sound.

The said finding of financial soundness is supported by the report of the Finance Division dated April 12, 1934. This report was based upon a report of the Engineering Division dated March 6, 1934, a prior report to that referred to above and one less favorable to the City. The [fol. 3474] Finance Division report of April 12, found that on the basis of the division of business estimated by the engineer-examiner, '50 per cent of sales the first year and 75 per cent the 20th year and all municipal business' the project will earn only about 1.05 times the debt service for the first several years with a deficit for the first year. Inasmuch as the estimate of the engineer-examiner referred to has now been modified so that the estimates of division of business is altered to all the municipal load and 60 per cent instead of 50 per cent the first year, with an increase of 2 per cent each year, it is obvious that the Finance Division would approve the loan on the revised basis. Furthermore, this Board is of opinion as stated above, that even the revised estimate upward of the engineer-examiner is too low in view of the heavy reduction of rates proposed. As stated above this Board is of opinion that the said reduction will increase the portion of business obtained by the City and also the net revenue.

[fol. 3475] 2. This Board has further reviewed the conditions attached to the report of the Engineering Division dated March 6th 1934, as follows:

'3-a The applicant shall furnish evidence satisfactory to the Administrator that the Alabama Power Company can be legally required to furnish service on a day to day basis until the acquisition by the municipality of the used and useable portions of the existing distribution system.'

This condition having been reviewed by this Board is disapproved as impossible of performance; and the following condition substituted:

"The applicant shall furnish evidence satisfactory to the Administrator that the Alabama Power Company can be legally required to furnish service on a day to day basis until the municipal system is ready for service.

COMPLAINANTS' EXHIBIT No. 777 (Excluded).

This Board has reviewed the further condition:

'3b. And that thereafter' (the acquisition of the competitive system) 'the power company will be without authority [fol. 3476] to sell power within the municipal limits.'

This condition is also disapproved by the reason that it prevents any loan being made as such a showing involves a lawsuit and is probably impossible of performance as the company has a franchise until October 1, 1949. If the TVA fails to purchase the distribution system of the company and the municipal system being under the necessity by its contract with TVA of offering rates at least 60 per cent less than existing rates, the company, being unable to provide an equally low rate will be unable to continue to compete and must withdraw. Hence this condition should be stricken out.

This Board has further reviewed conditions 4a of the engineer-examiner:

'(a) That no depreciation charges, taxes or any other items of expense, except normal operating expenses and power and lighting extensions shall be charged against the revenues of this project.'

It approves this condition.

[fol. 3477] It has also reviewed condition 4b:

'That all municipally used electric energy shall be paid for at current selling rate schedules annually during the interval of the loan from the general fund into the account of this project.'

This Board also approves this condition.

This Board finds also that the Engineering Division omitted to recommend a grant. Its report does not show any reason for this omission.

This Board finds that the applicant is as much entitled to a grant as other applicants to which grants have been allowed.

Resolved, that this Board recommends an allotment to the applicant in the sum of \$372,000, of which not to exceed thirty per cent of the cost of the labor and materials employed thereon, estimated at \$100,000, shall be a grant.

(Signed) Henry T. Hunt, Chairman."

[fol. 3478] COMPLAINANTS' EXHIBIT No. 778 (Excluded)

Excerpt from "Exhibit K" to Defendants' Answer (Transcript of Record in the case of TVA, et al., v. Ashwander, et al.) page 691:

Reestablishment of Electric Power Board of Review in PWA

"Effective May 9, 1934, the 'Electric Power Board of Review' is established, membership, Henry T. Hunt, Norris L. Cooke, and Otto M. Rau.

It will be the duty of this Board to review disapprovals, and special conditions imposed, by any division of PWA and to make recommendations to the Deputy Administrator with regard to applications of public bodies to finance the construction, repair, improvement or extension of electric power plant facilities.

The Technical Board of Review is instructed to refer to said Board, Henry T. Hunt, Chairman, room 5139, all such projects now pending before it on which it has not given notice of hearing.

The Projects Division is instructed to refer to Mr. Hunt summary report folders for such applications as have heretofore been and may hereafter be disapproved by any [fol. 3479] division or approved with any special conditions appearing on any divisional report.

The Electric Power Board of Review is directed to formulate and submit to the Administrator instructions for the guidance of the several divisions with regard to competitive situations and other controversial questions affecting this class of projects.

(Signed) Harold L. Ickes, Administrator."

[fol. 3480] COMPLAINANTS' EXHIBIT No. 779 (Excluded)

TVA Press Release of August 22, 1933

The Tennessee Valley Authority will oppose application by Southern Industries and Utilities, Inc., for permission to construct the Aurora Dam and power plant on the lower Tennessee river. This was announced today by Director David E. Lilienthal, in charge of the power phases of the Tennessee Valley program.

COMPLAINANTS' EXHIBIT No. 779 (Excluded)

W. E. Waldo, president of the utility company which has been working on the site under a preliminary permit, has requested the Federal Power Commission for a 50-year permit to enable his firm to go ahead with its development. Counsel for the Authority will argue against the granting.

This is the first test of the Authority's opposition to further exploitation of the Valley's waterpower and other resources until a definite conservation policy is worked out. The Authority is of the opinion that Congress intended that the former, being charged with the public's interests, should have exclusive jurisdiction in all future developments on the Tennessee River and its tributaries.

[fol. 3481] COMPLAINANTS' EXHIBIT No. 780 (Excluded)

TVA Press Release of July 24, 1933

The Tennessee Valley Authority has sent its consulting electrical engineer, Mr. Llewellyn Evans, into the Muscle Shoals area for the two-fold purpose of investigating the power field and checking up the readiness of the Wilson Dam for commercial light and power service. In the former connection, Mr. Evans will inquire into the proposed tie transmission line between Muscle Shoals and the Cove Creek project. If this line is deemed feasible, the Authority would like to begin its construction this fall.

Mr. Evans, who is a national authority on power rates, intends to make contact with enough prospective users of electricity to get an intimate picture of what they want and expect with the idea of supplying their needs.

The Authority has received tentative power applications from about 25 municipalities in Alabama, Kentucky, Mississippi and Tennessee, and inquiries involving others. Some of these places have municipal plants; others are served by private lines, and several have no electric service whatever.

[fol. 3482] There are two avenues open for the Authority to afford power service. The first is to bargain with existing private lines for service on a rate schedule to be established. The second is to build its own lines, serving groups of municipalities in the order of their application in so far as possible.

[fol. 3483] COMPLAINANTS' EXHIBIT No. 781 (Excluded)

TVA Press Release of July 31, 1933

The directors of the Tennessee Valley Authority have ordered the immediate preparation of preliminary plans for the tie transmission line between Wilson Dam at Muscle Shoals and the proposed dam at Cove Creek. The distance between these points is approximately 220 miles. Preparation of the plans will be under the direction of Mr. Llewellyn Evans, consulting electrical engineer, who is now at Muscle Shoals.

The directors have also authorized immediate action to provide power for Florence, Sheffield and Tuscumbia, Alabama. These municipalities are in the immediate vicinity of the power plant at Muscle Shoals. Negotiations with these places will be undertaken at once by Mr. Evans.

The directors' action on the transmission line and furnishing power to the three Alabama municipalities followed the report of Mr. David E. Lilienthal, member of the Board, who inspected the Government power facilities at Muscle Shoals before attending the meeting of the directors at Knoxville, Tennessee, where application for service was received from officials of that city.

The directors announce that the Authority will take over the services of approximately 200 men now employed by the War Department in the Cove Creek area.

[fol. 3484] COMPLAINANTS' EXHIBIT No. 782 (Excluded)

TVA Press Release of August 1, 1933

In recognition of his long and successful fight for Government control of the power resources of the Tennessee river system, the board of directors of the Tennessee Valley Authority announces that the proposed dam at Cove Creek will be named in honor of Senator George W. Norris of Nebraska. Thus, "the great Nebraskan and the New Deal will be remembered together in the historic Norris Dam in eastern Tennessee upon which work will shortly begin," declares Chairman Arthur E. Morgan.

Norris Dam will hold a commanding position in regulating the flow of the Tennessee river, and in providing the valley with the power needed to develop the new and enduring

COMPLAINANTS' EXHIBIT No. 782 (Excluded)

prosperity which President Roosevelt hopes to bring it through the agency of the Tennessee Valley Authority. The building of this dam and reservoir is the first major construction project in the huge undertaking. * * *

[fol. 3485] COMPLAINANTS' EXHIBIT No. 783 (Excluded)

TVA Press Release of August 10, 1933

In furthering its organization and looking toward executing preliminary projects with the least possible delay, the Board of Directors of the Tennessee Valley Authority has allocated specific duties to its three members as follows:

Arthur E. Morgan, chairman of the board, is delegated to supervise all matters concerned with the Norris Dam and reservoir and town at Cove Creek; land and regional planning, including subsistence homesteads (except agriculture), and housing; educational and training program, other than agriculture; engineering, including studies, plans and constructions for the control and use of water and mineral resources (except Muscle Shoals dam and power house and electrical transmission and distribution) and matters concerning raw material for fertilizer; social and economic organization and planning; forestry, soil erosion and conservation methods (tentatively), and will share with Dr. Harcourt A. Morgan matters relating to industry, especially relating to training for industry and its association with cooperatives, besides administration of general functions and coordination of a unified program.

[fol. 3486] All matters relating to agriculture are placed in charge of Dr. Harcourt A. Morgan. This includes rural life planning and matters relating to localized industry and its relation to agriculture. In addition, Dr. Harcourt A. Morgan will direct the design, construction and operation of smelters for phosphorous and for potash; a research program in the nature and behavior of fertilizers; the purchase, blending and sale of fertilizers; a chemical engineering department, and the program of research and development in the manufacture of fertilizers, cement and dry ice; maintenance and operation of Nitrate Plant No. 2 at Muscle Shoals; plans for a cement plant.

COMPLAINANTS' EXHIBIT No. 783 (Excluded)

Besides being in charge of the legal department and of all land appraisal, purchase and condemnation, David E. Lilienthal will look after the distribution of power, including relations with purchasers and prospective purchasers; all matters relating to the operation of the hydro-electric and steam-electric plants at Muscle Shoals; construction and operation of transmission lines, development of standardized accounting. Methods for power generation, transmission, and distribution, and the supervision of accounting for [fol. 3487] the Authority; proposals to exchange power for power sites, and transportation rate problems.

This does not mean that the individual directors will formulate policies for their separate divisions. The board as a whole will continue to adopt all policies. It will be the duties of the directors to see that the board's projects are carried out in their respective channels.

The chief purpose of this apportionment of duties is to enable the Authority to launch its vast program as expeditiously and as efficiently as possible.

[fol. 3488] COMPLAINANTS' EXHIBIT No. 784 (Excluded)

TVA Press Release of August 24, 1933

Formal or informal applications for power service received by the Tennessee Valley Authority to date involve more than 50 places in or near the sphere of development. The list includes:

Alabama	Georgia	Mississippi	Tennessee
Courtland	Augusta	Aberdeen	Beans Creek
Decatur	Dalton	Amory	Bells
Florence		Belmont	Blanche
Hillsboro	Kentucky	Booneville	Bolivar
Leighton	London	Coffeeville	Dyer
Moulton	Paducah	Columbus	Elora
Sheffield		Corinth	Flintville
Tuscumbia	Missouri	Fulton	Grand Junction
Wheeler	C. Girardeau	Houston	Henderson
		Iuka	Huntland
		Macon	Jackson

COMPLAINANTS' EXHIBIT No. 784 (Excluded)

TVA Press Release of August 24, 1933—Continued

Alabama	Georgia	Mississippi	Tennessee
		Nettleton	Kenton
		Prairie	Lebanon
		Starkville	Martin
		Tupelo	Maxwell
		West Point	Milan
			Newport
			Parsons
			Pulaski
			Rutherford
			Selmer
			Toone
			Trenton
			Union City
			Whiteville

[fol. 3489] COMPLAINANTS' EXHIBIT No. 785 (Excluded)

TVA Press Release of August 30, 1933

Transmission Line Surveys Start Aerial Mapping Bids to
Be Opened

Two survey parties are in the field locating the route of the transmission line which will tie in the Wilson Dam power plant at Muscle Shoals with the future power of the Norris Dam project, 220 miles distant, according to a statement made in Knoxville, Tenn. by David E. Lilienthal, a director and in charge of the power phases of the Tennessee Valley Authority. One party is working toward Knoxville from Wilson Dam, near Florence, Ala., while the other is starting from the Norris Dam site, 20 miles northwest of Knoxville. They expect to meet near the Alabama State line. Preliminary plans for the transmission line have been made from maps and data previously compiled by Federal and State engineers.

[fol. 3490] COMPLAINANTS' EXHIBIT No. 786 (Excluded)

TVA Press Release of August 31, 1933

**Address of Dr. Arthur E. Morgan Before the Kiwanis Club
of Knoxville, Tennessee, August 31, 1933**

* * * As the Tennessee Valley Law finally emerged from Congress it represented two kinds of purposes and aims. One kind was the definite purposes and aims to do specific things. One example of this was to make available to the public the power from the Wilson Dam at Muscle Shoals. Another purpose was to increase the steadiness and value of that power by building this large dam near your own city for the storage of water. Still another purpose was to connect those two with a transmission line so that the power could be regulated between them, and would be available along the way.

[fol. 3491] COMPLAINANTS' EXHIBIT No. 787 (Excluded)

TVA Press Release of September 2, 1933

Florence, Alabama. September 1. The final act in the transfer of Muscle Shoals property to the Tennessee Valley Authority was completed late Friday when David E. Lilienthal, Director in Charge of Power Development, formally signed a receipt for Wilson Dam and its power plant. Major R. R. Neyland represented the Army Engineering Office in the transfer.

[fol. 3492] COMPLAINANTS' EXHIBIT No. 788 (Excluded)

TVA Press Release of September 5, 1933

The names of more than 100 municipalities concerned by formal or informal applications for power received by the Tennessee Valley Authority were made known today by David E. Lilienthal, director in charge of the Authority's power program.

Prospective TVA power users now include 52 places in Mississippi, 36 in Tennessee, 16 in Alabama and 5 elsewhere. The list to date follows:

Mississippi—Tupelo, Aberdeen, Amory, Belmont, Booneville, Columbus, Corinth, Fulton, Iuka, Macon, Littleton,

COMPLAINANTS' EXHIBIT No. 788 (Excluded)

Coffeerville, Houston, Prairie, Starkville, West Point, Baldwin, Gunton, Saltillo, Rienzi, Verona, Shanon, Sturgis, Longview, Bradley, Caledonia, Smithville, Tremont, Burnville, Halcut, Paden, Tishomingo, Denis, Plantersville, Golden, Kossuth, Mantachie, Dorsey, Mooreville, Ratlift, New Albany, Tibee, Mayhew, Artesia, Crawford, Brooksville, Shuqualak, Pontotoc, Canton, Indianola, Cedar Hill and Ripley.

Tennessee—Grand Junction, Lebanon, Newport, Pulaski, Milan, Jackson, Bolivar, Selmer, Henderson, Whiteville, Martin, Parsons, Bells, Dyer, Rutherford, Kenton, Trenton, Union City, Cash Point, Blanche, Elkwood, Toney, Harvest, [fol. 3493] Elora, Huntland, Beans Creek, Maxwell, Flintville, Lewisburg, Columbia, Manchester, Taft, LaFollette, Lenoir City, Dayton and Dickson.

Alabama—Muscle Shoals City, Town Creek, Courtland, Hillsboro, Wheeler, Moulton, Leighton, Decatur, Florence, Sheffield, Tuscumbia, Red Bay, Athens, Huntsville, St. Florian, and Bridgeport.

Georgia—Augusta and Dalton.

Kentucky—Paducah and London.

Missouri—Cape Girardeau.

[fol. 3494] COMPLAINANTS' EXHIBIT No. 789 (Excluded)

TVA Press Release of September 22, 1933

Construction of Dam No. 3 (the Joe Wheeler Dam) above Muscle Shoals is approved as a relief measure by the Tennessee Valley Authority providing the cost is met with public works money.

Chairman Arthur E. Morgan of the Authority has wired Secretary of the Interior Harold L. Ickes, and Senators Hugo L. Black and John H. Bankhead of Alabama, as follows:

"The Tennessee Valley Authority heartily approves the construction of Dam No. 3 above Muscle Shoals on the Tennessee River as an emergency employment relief measure, on condition that it is built with public works money and not with Tennessee Valley Authority money, and that the carrying charges and construction cost shall not be charged

COMPLAINANTS' EXHIBIT No. 789 (Excluded)

to the Tennessee Valley Authority until the demand for power justifies the construction for that purpose.

"The dam is an integral part of the navigation program for the Tennessee River, and will be a part of the power development program when it is needed. The only disadvantage to building the dam now is that it will not come into full use at once. This disadvantage may be outweighed by the great advantage of providing employment, by favorable [fol. 3495] construction prices and the fact that the construction of Dam No. 3 will be a substantial aid to navigation on the Tennessee River below Chattanooga. The navigation locks at Dam No. 3 are, in fact, now in process of construction by the Army Engineers.

"This position we conceive to be in the interest of the public welfare. The Board of Directors of the Tennessee Valley Authority took formal action to this effect."

The site of Dam No. 3 is at the head of Wilson Lake, in Alabama, about 16 miles above Wilson Dam.

[fol. 3496] COMPLAINANTS' EXHIBIT No. 790 (Excluded)

TVA Press Release of September 28, 1933

Address of David E. Lilienthal, Director of the Tennessee Valley Authority, before the Rotary Club of Chattanooga, September 28, 1933.

The Tennessee Valley Project is an opportunity and a challenge to the people of the South. It is an opportunity without parallel, for it puts behind your plans for regional development the leadership, the prestige, and the power of the President and the Congress of the United States. It is a challenge because the eyes of the entire Nation are focused upon the people of this valley, who in the spirit of their sturdy pioneer forebears are breaking new ground and establishing a national leadership.

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Let us look at this problem in a cold blooded business way. The Tennessee Valley Authority power program is not a taxpayers' subsidy. It is a business undertaking.

COMPLAINANTS' EXHIBIT No. 790 (Excluded)

You are business men. Many of you are manufacturers just as we are. We are both obligated to operate our business on a sound basis. As a manufacturer, you would consider as most unsound any suggestion that you double the capacity of your plant, even if your bank would advance the money, unless you were pretty sure that you would be able to develop a market for the increased product by the time the plant addition was completed. Rightly so, you [fol. 3497] would be most critical of us, were we to do the same thing.

We would be doing just that, if we authorized or approved putting on the market additional blocks of power from these proposed new dams, before the market of the area could absorb the power of Muscle Shoals and Norris Dams. That we must not do, for it would violate the expressed mandate of Congress and of the President to operate the present and future power facilities on a self-supporting basis.

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The power program is one in which, of course, all of us are interested. The starting point in any discussion of the power policy and program of the Authority must be this: That the distribution of electricity is not like the usual private business, but, in the language of the ancient common law, is a business "affected with a public interest." By its very nature, the business of generation and distribution of power is a public business, because in our present-day community life we are all dependent upon that service. We need constantly to revert to this fundamental principle of the public character of the electric business.

How dependent we are upon power we sometimes fail to [fol. 3498] realize. It is in large measure due to electric power that for the first time in the history of civilization man is able to produce enough commodities to supply the necessities and even many of the luxuries to most of our people. We are fast approaching the mastery of production. It may well be that our chief difficulties in this depression center around the fact that we have not yet learned as a community to adjust ourselves to this revolutionary change.

This capacity to produce enough for all of us, which holds such great promise for a more universal and adequate

COMPLAINANTS' EXHIBIT No. 790 (Excluded)

standard of living, has been made possible, in large part, by electric power. And we are just at the beginning of this power age. The future possibilities are as limitless as the practical imagination of our scientists and the ingenuity of our inventors. No wonder, then, that it is so vital that we maintain the strictest public control over this great natural resource. The public must protect its interests in so vital a force. There are various expedients to accomplish this result. One is by commission regulation. It is pretty well recognized that regulation has not been entirely adequate to protect the public interest, and so to supplement regulation, Congress has provided for a measure of public [fol. 3499] operation on a limited scale. This public operation is to serve as a yardstick by which to measure the fairness of electric rates. It has an additional function. It is a reminder that electricity is a public service and that unless it is exercised by private corporations with fairness, with efficiency, without financial jugglery and with a due sense of responsibility to the paramount public interests involved, that the public at any time, may itself assume the function of providing itself with this necessity of community life.

This power program is a constructive measure. Congress has not declared a national policy against the private ownership and operation of public utilities. It has merely provided for an additional measure of public protection against unreasonable or arbitrary conduct of a business which, by its very nature, is a matter of fundamental public concern.

What the Authority is trying to do in its power program is to set up an area for power operations which will be on a comparable basis with typical private operations. To set up such a "yardstick" the Authority obviously must undertake to serve an area which is large enough and sufficiently concentrated, with enough population density and with a sufficiently diversified industrial, commercial [fol. 3500] and residential load to provide a fair test. As business men it is apparent to you that if the Authority is only to serve the parts of a territory which a private utility has not chosen to serve, or is to serve only sparsely populated areas, the result of our operations cannot possibly be set up as a measuring rod. The Authority will necessarily

COMPLAINANTS' EXHIBIT No. 790 (Excluded)

have to undertake to serve an area of concentrated industrial territory, good farms and favorable distribution possibilities. It will, therefore, be necessary to include several cities of fair size in the area. The people of Knoxville and Birmingham are soon to vote on the acquisition of their distributing systems. We are now constructing a tie line between Muscle Shoals and the new dam at Cove Creek and we propose to enter into contacts with municipalities and other agencies desiring this service in the territory between those two points.

Obtaining this fair market in which to sell power, seems to be in sight, in view of the interest shown by about one hundred fifty municipalities. In fact, the problem of choosing between applicants will apparently be a real one.

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As a new neighbor of yours, I appeal to you not to permit [fol. 3501] this opportunity for national leadership to fail through any lack of your support. I appeal to you to refuse to listen to the voices of those of little vision and of selfish purpose. This program will succeed only if you of the Valley treat this as a national project. I appeal to you to throw your energies and devotion into this national program which can mean so much to you and to your children.

[fol. 3502] COMPLAINANTS' EXHIBIT No. 791 (Excluded)

TVA Press Release of October 9, 1933

The Tennessee Valley Authority today called for bids on 675 miles of copper conductor for the tie transmission line to connect the Muscle Shoals power plant with Norris Dam near Knoxville. In an effort to spread employment, the Board of Directors announced that local labor will be utilized in the clearing of the right of way wherever feasible. Contracts will be made with the owners of the land across whose property the line is to extend. The owners will be permitted to retain the timber and will be required to pile and burn the brush. Special contracts, however, may be let wherever the right of way passes over large tracts.

COMPLAINANTS' EXHIBIT No. 791 (Excluded)

According to David E. Lilienthal, Director in charge of the Tennessee Valley Authority power program, this is the first of two transmission lines to be erected. While this line will furnish the current necessary for the construction of the Norris Dam, it is intended primarily as a tie line to connect the Wilson Dam power plant with the generators later to be installed at the Norris Dam. Later another line will be constructed along a different route so as to afford a wider distribution of power as well as to provide against interruption of service due to storms or accidents. The [fol. 3503] initial tie line will be 226 miles in length, or about eight miles longer than the air line distance between Wilson and Norris dams. An aerial survey of the right of way was recently completed.

Crossing the Tennessee River about 1,200 feet below the site of proposed Dam No. 3 near Muscle Shoals, the line will pass near the site of the proposed White Creek Dam and come within 23 miles of Chattanooga and 18 miles of Knoxville. The Board of Directors also decided to have the foundations for the towers where the line crosses the Tennessee River near Muscle Shoals installed by special contracts, with the Authority furnishing the necessary cement and foundation bolts. Contracts for the steel towers will provide for delivery and erection both in the case of river crossings and terminals and substations.

Not only will the construction of the tie line afford considerable employment at this time, Mr. Lilienthal pointed out, but will result in a saving for material costs which are expected to be much higher later on. In addition, the use of Muscle Shoals power in the construction of Norris Dam will pay the carrying charges on the line for almost two years.

[fol. 3504] COMPLAINANTS' EXHIBIT No. 792 (Excluded)

TVA Press Release of October 11, 1933

Chairman Arthur E. Morgan of the Tennessee Valley Authority will speak over the Columbia network from Station WJSV at Washington, D. C., at 3:30 P. M., Knoxville time, on Thursday. Local listeners probably will have to tune in on Station WHAS of Louisville if they care to hear this talk.

[fol. 3505] COMPLAINANTS' EXHIBIT No. 793 (Excluded)

TVA Press Release of October 12, 1933

The Tennessee Valley Authority Radio Talk for the American Legion, October 12, 1933

Arthur E. Morgan

When President Roosevelt outlined his recovery program, he planned for the spending of several billions of dollars for emergency work or relief. But he determined that, if possible, one undertaking should be of a different sort. Somewhere in America he wanted to see a beginning of social and economic planning.

In his message on the Tennessee Valley Authority he said that in the past America has "just grown" and that it is time this casual and haphazard development be replaced by design and forethought. He chose the Tennessee River region as the site of such an undertaking, and the Tennessee Valley Authority is the organization set-up to give expression to that hope.

Mr. Tugwell, in one of his articles discussing the President's program, says this of the Tennessee Valley Authority:

"This work carries more significance for the future than any other single attempt of the Administration to make life [fol. 3506] better for all of us. It is in no sense emergency as so many other actions have necessarily been. It did not have to be done to stave off financial panic or avert war, or to relieve distress. It is a deliberate turning toward the future, a commitment to an ideal. Its success can depopulate cities, destroy a thousand entrenched privileges, invalidate a whole tradition of single-hearted self interest."

Mr. Tugwell tells me that he discussed the project with the President before writing this article, and it is in line with what I myself have heard from the President.

In addition to the general program of economic planning, the Tennessee Valley Authority Act provides for two clearly defined projects. They are the generation and transmission of power, and the development of cheaper fertilizer.

COMPLAINANTS' EXHIBIT No. 793 (Excluded)

The Wilson Dam at Muscle Shoals can produce a variable amount of power. When the Tennessee River is high, there is water enough to develop three hundred thousand horsepower or more. When the river is very low, there is water enough for only fifty thousand. By building the Cove Creek Dam, now called the Norris Dam, on the Clinch [fol. 3507] River, which is a branch of the Tennessee above Muscle Shoals, a vast storage reservoir will be formed which will regulate the flow and also produce power. With this regulation the dependable power will be increased about four times. A transmission line will unite the two power plants. The power program is to transmit electric current to cities and towns and rural communities, and to sell it at rates that will encourage widespread use. As soon as a market is established, this part of the program should be self-sustaining. A great increase in the use of electric power for household and farm use will be a powerful element in improving social and economic welfare.

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The Tennessee Valley region contains twice as many people in rural areas as are necessary for agricultural work. It should be possible to develop local industries, with the help of cheap power, that will enable these communities to manufacture what they would like to buy. With an intelligent and ambitious population, great natural resources, and cheap power, human ingenuity should bring to an end the present wide-spread want and idleness.

[fol. 3508] COMPLAINANTS' EXHIBIT No. 794 (Excluded)

TVA Press Release of October 13, 1933

Statement by David E. Lilienthal, TVA director in charge of power development:

Determined efforts are being made to inject the Authority into local situations in which voters are considering the policy of acquiring their electric distribution systems and then contracting with the Authority for low cost Muscle Shoals power. These local questions are matters for the

COMPLAINANTS' EXHIBIT No. 794 (Excluded)

citizens of each community to decide for themselves. It should, however, be obvious that the Authority does not have enough power to supply all the communities in the area and that, therefore, the rule of "first come, first served" will almost be a necessity.

[fol. 3509] COMPLAINANTS' EXHIBIT No. 795 (Excluded)

TVA Press Release of October 15, 1933

In addition to providing for the enrollment of young men from local areas, the Tennessee Valley Authority has announced that five thousand experienced forest workers, members of the Civilian Conservation Corps, will leave Idaho today and tomorrow for the Tennessee Valley to begin work of reforestation, flood control and soil erosion in the Norris Dam Watershed and in the vicinity of Muscle Shoals.

Chairman Arthur E. Morgan said that definite locations have been selected for twenty-five camps to provide living quarters for these units. Twenty camps providing for 4,000 men will be located on the Norris Dam Watershed. Five camps to house 1,000 men will be erected on the 1,200 acre Government reservation at Nitrate Plant No. 2 at Muscle Shoals. Each camp will provide for approximately 200 men.

The arrival of these units will mark the beginning of a widespread attack on the problem of flood control and soil erosion in the Tennessee Valley, Edward C. M. Richards, forester and head of the Forestry and Soil Erosion Department of the Tennessee Valley Authority, said today. [fol. 3510] "We have arranged to bring these young men to the Valley to carry out a very important part of the Tennessee Valley Authority's program." Mr. Richards added. "It is evident that when the Government invests a large sum of money in a power system, this investment should be protected against destruction through floods and the silting up of the storage reservoirs. This is particularly important in the case of the Norris Dam-Muscle Shoals development.

[fol. 3511] COMPLAINANTS' EXHIBIT No. 796 (Excluded)

TVA Press Release of October 17, 1933

Address of David E. Lilienthal, Director and General Counsel, Tennessee Valley Authority, Before the Rotary Club of Memphis, Oct. 17, 1933.

Seated before an open fire in his home in Warm Springs last February, Franklin D. Roosevelt formulated and expressed a new national policy for the development of the resources of our country. In one of his first informal conversations with the people, he told of his plan for the development of the Tennessee River Valley—a plan which marks the beginning of a new departure in American economic and political history.

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This Tennessee Valley project is an opportunity and a challenge to the people of the South. It is an opportunity without parallel, for it puts behind your plans for regional development the leadership, the prestige, and the power of the President and the Congress of the United States. It is a challenge because the eyes of the entire nation are focused upon the people of this area, who in the spirit of their sturdy pioneer forebears are breaking new ground and establishing a national leadership.

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I want to talk to you first about the immediate program [fol. 3512] for today and what the Authority is doing to carry that forward. In order to expedite matters, the Board some weeks ago determined to divide initial responsibility for the execution of this program among its three members. To Chairman Arthur E. Morgan went the heavy responsibility for the construction of the dam at Cove Creek, which will be one of the largest power dams in the country when it is completed. • • •

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In addition to the construction work going on at the Norris Dam, work is under way on the transmission line between the Wilson and Norris Dams. The Aerial survey

COMPLAINANTS' EXHIBIT No. 796 (Excluded)

for the lines has been completed. Easements are being purchased. . . . Bids will be received on October 20th for 675 miles of wire. Coincident with this bids will be asked for the clearing of the right of way, for the construction of the foundations and for the construction of the transmission line towers.

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The power program of the Authority is an important part of its present plans and of the long-range regional program. The starting point in any discussion of this power policy and program must be this: That the distribution of electricity is not like the usual private business, but, [fol. 3513] in the language of the ancient common law, is a business "affected with a public interest." By its very nature, the business of generation and distribution of power is a public business, because in our present day community life we are all so utterly dependent upon that service. We need constantly to revert to this fundamental principle of the public character of the electric business.

What power has done for us and what promise it holds we often fail to realize. It is in large measure due to electric power that for the first time in history we are equipped to produce enough commodities to supply the necessities and even many of the luxuries to most of our people. The future possibilities are limitless. Of "the promise of power, Mr. Stuart Chase recently said: "We are witnessing the oncoming of a new kind of civilization as electric power displaces older other power forms. It will shift populations, change the map, profoundly affect both the number and the skills of workers, revise—upward—the quality and variety of commodities, break down the division between country man and city man; and, if it is not wrecked by the brute claims of an obsolete financial system, it promises a world replete with more freedom and happiness than mankind has ever known Electricity can give us universally [fol. 3514] high standards of living, new and amusing kinds of jobs, leisure, freedom, an end to drudgery, congestion, noise, smoke and filth."

Is it any wonder then that the people are determined to maintain the most vigilant public control of this liberating

COMPLAINANTS' EXHIBIT No. 796 (Excluded)

force? Various expedients for the public's protection have been adopted. One is regulation by state commissions. It is generally recognized that such regulation has not been entirely adequate to protect the public interest. And so, to supplement regulation, Congress has provided for a measure of public operation on a limited scale. This public operation is to serve as a yardstick by which to measure the fairness of electric rates. It has an additional function. It is a reminder that electricity performs a public service and that unless it is exercised by private corporations with fairness, with efficiency, without financial jugglery and with a due sense of responsibility to the paramount public interests involved, that the public, at any time, may itself assume the function of providing itself with this necessity of community life.

This power program is a constructive measure. Congress has not declared a national policy against the private [fol. 3515] ownership and operation of public utilities. It has rather provided for an additional measure of public protection against abuses in the conduct of a business which, by its very nature, is a matter of fundamental public concern.

What the Authority is required to do in its power program is to set up an area for power operations which will be on a comparable basis with typical private operations. To set up such a "yardstick" the Authority obviously must undertake to serve an area which is large enough and sufficiently concentrated, with enough population density and with a sufficiently diversified industrial, commercial and residential load to provide a fair test. As business men, it is apparent to you that if the Authority is only to serve the parts of a territory which a private utility has not chosen to serve, or is to serve only sparsely populated areas, the result of our operations cannot possibly be set up as a measuring rod. The Authority will necessarily have to undertake to serve a balanced area of concentrated industrial activity, including some cities of substantial size; good farms and reasonably favorable distribution possibilities.

The Board of the Tennessee Valley Authority some weeks ago directed the formulation of wholesale rate

COMPLAINANTS' EXHIBIT No. 796 (Excluded)

[fol. 3516] standards to form the basis for contracts for power with municipalities and other agencies within the yardstick area. Since the statute imposes a measure of responsibility upon the Authority for the rates charged to the ultimate consumers of electricity, a proposed schedule of rates to the householder and farmer was also worked out. . . .

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I suppose it is obvious that all computations concerning costs are based on the expectation that the Authority will sell the power which it has available. Muscle Shoals was turned over to us as a going plant, but not as a going concern with customers. Obviously, if we sell only one kilowatt hour, our cost will be hundreds of thousands of dollars a kilowatt hour rather than a few mills. If the power is not utilized in volume, no one will receive the great potential benefits of the wealth of the Tennessee River. It is axiomatic in the electric business that an increase in use decreases the cost per unit of output. Accordingly, we look forward to a maximum use of our facilities, because it is in that way that the Authority and those agencies which buy its power at wholesale can steadily bring down rates to the householder, the farmer and the business man, and [fol. 3517] bring to this area the economic and social benefits of the President's plan.

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As a new neighbor of yours, I appeal to you not to permit this opportunity for national leadership to fail through any lack of your support. I appeal to you to refuse to listen to the voices of those of little vision and of selfish purpose. This program will succeed only if you of the area treat this as a national project. I appeal to you to throw your energies and devotion into this national program which can mean so much to you and to your children.

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[fol. 3518] COMPLAINANTS' EXHIBIT No. 797 (Excluded)

TVA Press Release of October 20, 1933

**What Difference Will the Tennessee Valley Authority
Make?**

Talk at Chamber of Commerce Meeting, Asheville, North Carolina, October 20, 1933, by Arthur E. Morgan, Chairman of the Board, Tennessee Valley Authority

* * * Wilson Dam was undertaken as a war measure. Its completion after the war was opposed by those who insisted that the generation and distribution of power should be solely a private industry. Finally Wilson Dam was completed, and then it lay almost idle for six years while a contest was fought out in Congress between the advocates of public and those of private generation and distribution of power. Twice Congress passed bills for the public operation of the Wilson Dam power plant, but each time the bill was vetoed by the President. Finally President Franklin Roosevelt proposed a general program of public generation and transmission of power as a part of the Tennessee Valley Authority program. One of his aims was to prepare a "yard stick" of public ownership. In this division of work among the directors, that of trans-[fol. 3519] mitting and selling power was assigned to Mr. David Lilienthal.

The law provides that power from Muscle Shoals or from other developments must be sold primarily for domestic use in cities and rural areas. Sales can be made to private power companies or for manufacturing purposes, but household and farm use shall have first place.

The Wilson Dam power plant at Muscle Shoals is called a "run of the river" plant. That is, there is very little storage of water in the lake above the dam in the Tennessee River. When the Tennessee River is high during the winter there is an abundance of water, and therefore an abundance of power. During the driest summer seasons the flow is small and therefore only a relatively small amount of power can be developed. To correct this wide variation of flow the Tennessee Valley Authority Act provides for the construction of the Norris Dam and power plant on the Clinch River more than 200 miles upstream from

COMPLAINANTS' EXHIBIT No. 797 (Excluded)

Muscle Shoals. In the distribution of work among the directors, the building of this and other dams fall to me. The Norris Dam, formerly called the Cove Creek Dam, will create a great storage reservoir, great enough to store [fol. 3520] almost a year's rainfall. By operating the Norris Dam and power plant and the Wilson Dam and power plant as a single system, a very great increase of power is possible. During the winter, when the Tennessee River is high and power is abundant at Muscle Shoals, the Norris Dam plant will be shut down and the water will be stored in the reservoir. During the summer when the Tennessee River is low and power is scarce the Norris Dam power plant will be operated. The water used for generating power at the Norris Dam will then flow down to the Wilson Dam where it will be used again to develop more power. The two dams operate as a single system will generate about six times as much dependable power as either one alone. A transmission line is provided for in the law to connect these two plants and to regulate the supply of power between them. Materials are now being purchased and the land cleared for building that line.

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Further down on the Tennessee River are other power projects. I spoke of the Wilson Dam project as a "run of the river" power plant. That is, it develops a large amount of power in high water and a small amount in low water. [fol. 3521] Now the management of a power plant up here in Western North Carolina has a great deal to do with the nature of a plant lower down. If the plant on the upper branches, with a large storage reservoir is run for its own industry alone, then it must use its water somewhat uniformly throughout the year. That which is let down during the summer helps the power plants down the river, where summer power is scarce. But the water let out of the upper reservoir during the high water season of winter and spring is wasted below, for there is already more water in the lower river than is needed.

If the up-river plants and down-river plants are connected by transmission lines and are operated as a single system, a different result can be achieved. During high water in the winter the lower plants, where there is no

COMPLAINANTS' EXHIBIT No. 797 (Excluded)

storage, will be run to full capacity. The upper plants that have a large amount of storage will shut down and will save their water, and will use electricity from the down-river plants. Then during low-water in summer, when the down-river plants do not have enough water, the up-river plants will draw on their storage reservoirs and will produce power in larger quantities when it is most needed. Not only that, [fol. 3522] but the water which passes through the up-river plants must pass through every power plant on the Tennessee River all the way down to the Ohio River, and produces power at each one at the time of year when it is needed most.

By operating the entire Tennessee River and its branches as one organized system under government control, the value of the power developed would probably be at least twice as great as though the various developments should be operated independently. The exchange of power among private companies does not eliminate these wastes, though it may reduce them. Here is a practical case of economic planning which is possible of achievement.

Now, in closing, how does this directly affect North Carolina?

Personally, I should hope that in the spreading system of power plants North Carolina would soon be included, as soon as demand for power may justify an increase of supply. . . .

[fol. 3523] COMPLAINANTS' EXHIBIT No. 798 (Excluded)

TVA Press Release, of November 4, 1933

The Tennessee Valley Authority today awarded a contract for 675 miles of aluminum conductor cable, steel reinforced, to the Aluminum Company of America. The conductor is to be used in the construction of the tie transmission line between Muscle Shoals and Norris Dam.

The Aluminum Company's bid of \$400,149.39 for the conductor and accessories showed a saving of approximately \$278,000 over the next lowest bid. This represents a sum equal to the cost of operating the Muscle Shoals power plant for more than a year.

COMPLAINANTS' EXHIBIT No. 798 (Excluded)

The acceptance of the Aluminum Company's bid was recommended by Llewellyn Evans, chief electrical engineer for the Authority, and his recommendation was approved after extensive study by other engineers of the Authority. The bid was accepted by the Board after consultation with the Bureau of Standards.

In accordance with the standard practices of the TVA, all bidders were required to show compliance with the applicable rules and regulations of the NRA.

The tie transmission line is approximately 228 miles long and will pass within 23 miles of Chattanooga and about 18 [fol. 3524] miles of Knoxville. Acquisition of right of way for the line is already under way. Contracts for clearing the right of way and installing foundations will be let in localized groups so as to spread benefits over the entire distance traversed by the line.

[fol. 3525] COMPLAINANTS' EXHIBIT No. 799 (Excluded)

TVA Press Release of November 7, 1933

Address of David E. Lilienthal, Director and General Counsel, Tennessee Valley Authority, Before Joint Meeting Rotary Club, Chamber of Commerce and Exchange Club of Nashville, Tennessee, November 7, 1933

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This Tennessee Valley Project is an opportunity and a challenge to the people of the South. It is an opportunity without parallel, for it puts behind your plans for regional development the leadership, the resources and the power of the President and the Congress of the United States. It is a challenge because the eyes of the entire Nation are focused upon the people of this area, who in the spirit of their sturdy pioneer forebears are breaking new ground and establishing a national leadership.

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The power program of the Authority is an important part of its present plans and also of the long range regional [fol. 3526] program. The starting point in any discussion

COMPLAINANTS' EXHIBIT No. 799 (Excluded)

of this power policy and program must be this: That the distribution of electricity is not like the ordinary private business. By its very nature, the generation and distribution of power is a public business, because in our present day community life we are all so utterly dependent upon that service.

What power has done for us and what promise it holds, we often fail to realize. It is in large measure due to electric power that for the first time in history we are equipped to produce enough commodities to supply the necessities and even many of the luxuries to most of our people. And we are witnessing but the beginning of the power age. The future possibilities are limitless. Of "the promise of power," Mr. Stuart Chase recently said: "We are witnessing the oncoming of a new kind of civilization as electric power displaces older power forms. It will shift populations, change the map, profoundly affect both the number and skills of workers, revise—upward—the quality and variety of commodities, break down the division between country man and city man; and, if it is not wrecked by the brute claims of an obsolete financial system, it promises a [fol. 3527] world replete with more freedom and happiness than mankind has ever known. * * * Electricity can give us universally high standards of living, new and amusing kinds of jobs, leisure, freedom, and end to drudgery, congestion, noise and smoke." Is it any wonder then that the people are determined to maintain the most vigilant public control of this liberating force?

In order to comprehend fully the reasons for the power program set out in the Tennessee Valley Authority Act, it is necessary to recall what has been happening in the United States during the past ten years. It is necessary to understand that the people back home have become thoroughly aroused; that they are determined that the disgraceful looting of the public business of power shall not be repeated. You are all familiar with the sordid story. I need not recall to your minds the quarter of a million dollars which that leading citizen of Greece, Mr. Samuel Insull, paid to the Chairman of the State Commission which was supposed to be regulating his Illinois utilities. Those of you who are investors are familiar with the story of how some operating utilities were bled by speculating holding companies, of the

COMPLAINANTS' EXHIBIT No. 799 (Excluded)

dizzy pyramiding of stocks, of write-ups, of unconscionable [fol. 3528] bonuses, of the purchase of utility plants at outrageously high figures and the issuance of securities on the basis of such prices. Instances of those practices can be cited to you from coast to coast.

I have no desire to intimate that every public utility followed such practices. There were many notable exceptions. But there can be no question that in the last decade the power business was dominated by financial pirates.

Nor have the people back home forgotten the story which was revealed by the Federal Trade Commission in its investigation of the propaganda activities of the electric industry. There has never been a bolder attempt to buy the public opinion of the people of the United States. That widespread scheme of capturing the sources of public information would have destroyed the American system of democracy which Jefferson and Jackson established.

The attempt to gain editorial favor and color the news through advertising contracts was one of the most brazen steps in this program. A few years ago the publicity director for the utilities for Tennessee made the following report: "Our advertising campaign started in the middle of January and since that time advertising has been carried [fol. 3529] in more than 100 papers in Tennessee. These were placed during a personal call on the editors, at which time an occasion was taken to discuss the matter with the editors, and place before them the facts as we see them. We have approximately forty favorable editorials written on this matter . . . at a cost of less than \$700.00, we have been able to get our story in papers whose combined circulation is approximately 350,000, and as a result of these advertisements and our personal contact with the editors we have received a very large number of favorable editorials."

Now this is what had been going on throughout the United States. Regulation by commission had in many states proved ineffectual. In some states it was perfectly obvious that the regulators were not regulating the utilities, but in effect the utilities were regulating the regulators. In other states, the regulatory commissions were doing an honest and sincere job, but were hampered by the interminable procedure of regulation. And so, to supple-

COMPLAINANTS' EXHIBIT No. 799 (Excluded)

ment regulation by Commissions, Congress passed the Tennessee Valley Authority Act. This Act is not an assault upon private ownership and management of public utilities. But it is a determined attack on private mismanagement of [fol. 3530] the public business of power at the expense of the people back home—consumers and investors alike.

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This public operation is to serve as a "yardstick" by which to measure the fairness of electric rates. It has an additional function. It is a reminder that electricity performs a public service. It is a reminder that unless that business is carried on by private corporations with fairness, without financial jugglery and with a due sense of responsibility to the paramount public interest, that the public, at any time may assume the function of providing itself with this necessity of community life.

What the Tennessee Valley Authority is required to do in its power program is to set up an area for power operations. That area is to be on a comparable basis with typical private operations. To set up such a "yardstick" the Authority obviously must undertake to serve an area which is large enough and sufficiently concentrated, and with an adequately diversified industrial, commercial and residential load to provide a fair test. As business men, it is apparent to you that if the Authority is to serve only the parts of a territory which a private utility has not chosen to serve, or is to serve only sparsely populated areas, the result of our operations cannot possibly be set up as a measuring [fol. 3531] rod. The Authority will necessarily have to undertake to serve a balanced area, including some cities of substantial size, good farm territory and reasonable favorable distribution possibilities.

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The Authority is under a duty to promote the widest possible use of electricity. The rate charged the ultimate consumer by those who purchase electricity from the Authority is, therefore, a proper subject of such a contract as that with the City of Tupelo. The domestic rates which Tupelo proposes to charge its citizens are identical with

COMPLAINANTS' EXHIBIT No. 799 (Excluded)

those suggested by us in a public statement released on September 15. Those rates are as follows: For the first 50 kilowatt hours per month 3 cents per kilowatt hour; for the next 150 kilowatt hours 2 cents per kilowatt hour, for the next 200 kilowatt hours 1 cent. The excess over 400 kilowatt hours, four mills per kilowatt hour. A minimum monthly use is provided for. A householder in Tupelo using fifty kilowatts per month at the present time pays \$3.50. After Tupelo is operating under the terms of this contract, he will pay \$1.50 or 57.2 per cent less.

The industrial rates which the city of Tupelo proposes to put into effect will be of benefit to that community. For example, a large cotton mill in Tupelo for one month's electric supply in 1933 paid \$3375. Its bill under new rates to be put into effect by Tupelo would have been \$1865; a saving of \$1510, or 44.7 per cent.

The Commercial lighting bills are equally interesting. At the present time, a user of commercial power consuming 500 kilowatts per month pays \$34.00 a month. Under the contract to which Tupelo has agreed, the cost will be \$13.75, a saving of \$20.25, or 59.4 per cent reduction.

The Authority is planning to throw its energies and resources into a program of electrification of Lee County. The combined efforts of Tupelo, the Lee County Farmers Power Association and the Tennessee Valley Authority will produce definite results in the next three years. The consumption of power in the city of Tupelo is going to greatly increase. These people are determined even to make sacrifices in order to show the country that when Tupelo sets out to accomplish a great enterprise that the spirit and community pride of that city will conquer every difficulty. The rates which Tupelo has established for domestic, commercial and industrial purposes are going to bring great changes and benefits to this community. They are casting aside all [fol. 3533] the warnings of the timid, and in the spirit of the New Deal, are going forward to a more prosperous city and country and a fine balance between industry and agriculture.

Industrialists will become interested in Lee County. There will be many inquiries about the feasibility of locating small factories within this area where they will have the benefits of low cost of power, a high grade of people with which to

COMPLAINANTS' EXHIBIT No. 799 (Excluded)

work and community leadership. The people of Tupelo are not interested in a huge industrial city, for they know of the ills which accompany such an enterprise. They prefer to continue as they have begun, with a sane development in which the city and the farmer work hand in hand toward a stable prosperity for both city and country.

The rural areas will greatly benefit from the leadership and the organizing ability which the farmers of this area have exhibited. The Authority plans to put at the disposal of this alert group of farmers the services of technical experts. The most economical means of building farmers lines through cooperatives will be worked out. Plans for refrigeration, for water pumping and for making farm life more pleasant will be the subject of cooperative study and activity for the Farmers Association and the Tennessee Valley Authority. Lee County we believe will give a picture [fol. 3534] of what power can do in the hands of townspeople and farmers who are determined to secure its full benefits.

I do not want to be misunderstood; what Tupelo agrees to do and what the Authority agrees to do cannot be done in every community. It cannot be done in a community in which the municipal utility is left the subject of political fortune. It cannot be done where the people of the community are not actively interested in the success of the enterprise. It cannot be done where the city officials are timid or badly advised. It cannot be done where the city officials are not free agents, but have been bought and paid for by private interests.

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Here is an opportunity for industry and for government to display qualities of statesmanship. The Authority must carry out the national policy entrusted to it. It must acquire a market for its power. It must work toward a wider use of electricity in the home, the farm and the factory. All of these objectives can be reached without the predicated calamities to the industry and its bona fide investors. If the Authority succeeds in its plans to develop new uses for electricity, and by low rates and wide distribution of low cost appliances can increase existing uses, private utilities

COMPLAINANTS' EXHIBIT No. 799 (Excluded)

[fol. 3535] and the electric manufacturers can both share in the benefits. If in acquiring a market we can use existing facilities of private utilities, of course we will pay a fair price for them. By contracts with private utilities for interchange of power, economies and service betterment can be effected in which the utilities will derive benefits. I could cite other concrete instances to the same point. There will be room for both private and public operations, and both can succeed, if fair dealing and moderation prevail over councils of warfare and malice. If there is a genuine desire to work with this project and not to obstruct or destroy it, ways and means can and will be found for the electrical industry and government to work without friction in expanding the use of electrical energy for the benefit of all of our people.

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As a new neighbor of yours, I appeal to you not to permit this opportunity for national leadership to fail through any lack of your support. I appeal to you to refuse to listen to the voices of those of little vision and of selfish purpose. I appeal to you to throw your energies and devotion into this national program which can mean so much to you and to your children.

[fol. 3536] COMPLAINANTS' EXHIBIT No. 800 (Excluded)

TVA Press Release of November 11, 1933

"A Five Point Program for the Electrification of America"

Address of David E. Lilienthal, Director and General Counsel, Tennessee Valley Authority, before the Lawyers Club. Atlanta, Georgia, Friday Evening, November 10, 1933.

The Tennessee Valley Authority Act marks the beginning of a new national power policy and national power program. This new national policy has two major objectives. The first objective is more effective protection of the public interest, by the setting up of a measure of public operation of power as a "Yardstick." The second objective of this new national policy is a greatly increased use

COMPLAINANTS' EXHIBIT No. 800 (Excluded)

of electricity in the homes, the farms, and the factories of the United States—an electrified America.

The President and the Congress have set themselves [fol. 3537] to the task of putting to work the vast sources of electricity which lie idle and unused. We are working toward no less a goal than the electrification of America. The plans have been laid. Legal authority is ample. The economic difficulties can be overcome. The project is practical and feasible. The program can be carried out. Within the next decade it lies within the power of the people of the United States to make electricity in very truth the servant of the average man and woman in the homes, farms and places of business of this country.

The power program of the Authority is a crucial part of its plans for immediate action and of the long range program for the development of this region. This power program is of particular interest not only within the valley, but it has and is intended to have a national significance. For the problems which center about the power question here in the Southeastern region of the United States are questions not peculiar to this area, but which are common to the country as a whole.

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The national power policy of the President and the Congress written into the Tennessee Valley Authority Act recognizes that electric power, next to the soil, is our greatest [fol. 3538] resource. It recognizes that the people must maintain public control of this liberating force. This is the first objective of the national power policy to which I have referred.

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Now that is what had been going on throughout the United States. Regulation by commissions had in many states proved ineffectual. In some states it was perfectly obvious that the regulators were not regulating the utilities, but, in effect, the utilities were regulating the regulators. In other states, the regulatory commissions were doing an honest and sincere job, but were hampered by the interminable procedure of regulation, with rate cases sometimes dragging through a decade. And so, to supplement regulation by

COMPLAINANTS' EXHIBIT No. 800 (Excluded)

commissions, Congress passed the Tennessee Valley Authority Act. This Act is not an assault upon private ownership and management of public utilities. But it is a determined attack on private mismanagement of the public business of power at the expense of the people back home—consumers and investors alike.

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It was with such a background that Congress passed the Tennessee Valley Authority Act, and set up a measure of public operation of the power business. This public operation [fol. 3539] is to serve as a yardstick by which to measure the fairness of electric rates. It has an additional function. It is a reminder that electricity performs a public service. It is a reminder that unless that business is conducted by private corporations with fairness, without financial jugglery and with a due sense of responsibility to the paramount public interest, that the public at any time may itself assume the function of providing itself with this necessity of community life.

What the Tennessee Valley Authority is required to do in its power program is to set up an area for power operations. That area is to be on a comparable basis with typical private operations. To set up such a "yardstick" the Authority obviously must undertake to serve an area which is large enough and sufficiently concentrated, and with an adequately diversified industrial, commercial, and residential load to provide a fair test. As business men, it is apparent to you that if the Authority is to serve only the parts of a territory which a private utility has not chosen to serve, or is to serve only sparsely populated areas, the result of our operations cannot possibly be set up as a measuring rod. The Authority will necessarily have to undertake to serve a balanced area, including some cities of substantial size, good farm territory, and reasonably favorable [fol. 3540] distribution possibilities.

This power program is a constructive measure. Congress has not declared a national policy against the private ownership and operation of public utilities. It has rather provided for an additional measure of public protection against abuses in the conduct of a business which, by its very nature, is a matter of fundamental public concern.

COMPLAINANTS' EXHIBIT No. 800 (Excluded)

So much for the first objective of the Tennessee Valley Authority—the regulatory, public control purposes of this national power policy. We come then to the second objective, of at least equal significance.

The power program of Congress and the President has as its major objective a constantly wider use of electricity. The goal of this national power policy is a constructive one: it is nothing less than the electrification of the homes and farms of the United States. * * *

Looking at the country as a whole, without respect to public operation or private operation, it is perfectly evident that we now have and soon will have a tremendous surplus supply of electricity. Within the area of the Tennessee Valley for example, privately owned electric companies have generating and transmission facilities which [fol. 3541] can care for between 30% and 40% more demands for electricity than is now required, even allowing for reasonable spare capacity. A fair estimate is that 25 per cent of the investment in power houses and transmission lines is idle, and is piling up fixed charges, because the customers of these companies are still tied to a low average use of electricity. The Tennessee Valley Authority has a hydro-electric plant at Muscle Shoals with a rated installed capacity of 250,000 hp. But that is only the beginning of the story. The Authority is constructing a dam and power house at Cove Creek, and another dam and power house above Muscle Shoals at what is known as the "Joe Wheeler" dam, which, together will increase the capacity of Wilson Dam to at least 600,000 hp. * * *

I suggest a 5-point program which I should first like to enumerate and then discuss more in detail:

1. We must begin thinking in terms of an electrified America, and cast aside the tradition which is binding us to our present niggardly use of electricity.
2. Our entire electric rate structure must be re-examined and drastically revised.

COMPLAINANTS' EXHIBIT No. 800 (Excluded)

3. Electric-using appliances must be put into the homes and on the farms on a scale heretofore not successfully attempted.

[fol. 3542] 4. All the forces of business, scientific, and engineering ingenuity and technique must be concentrated upon the problem of reducing certain of the costs of operation.

5. The people of the country must be brought to realize that there is a pool of electricity lying idle, ready and waiting to be used, and to realize what electricity can do in lightening their burdens, in increasing their incomes and making for a richer and better life.

Turning to the first point of the program. If we load our minds with the idea that because a thing has not been done that it cannot be done, we might as well admit complete defeat in this whole program. If we admit that the use of electricity cannot be increased many fold; if that is our mental attitude, then we must be logical and immediately stop construction of the Cove Creek dam and of the Joe Wheeler dam. . . .

Second: The revision downward of electric rates. In my considered judgment the greatest single obstacle in the way of a widespread use of electricity has been the rates which have been charged for electricity. We believe that, with notable exceptions, the rates for electricity throughout the United States constitute a barrier between the people and [fol. 3543] the great resource of electricity. A drastic revision downward of electric rates is an essential part of this program. Such drastic reductions in electric rates, in our judgment are essential to any substantial increase in the use of electricity for domestic, farm, and industrial purposes. It is our opinion, amply supported by experience, that the effect of such drastic provision will not result in a decrease in gross revenues, or in net income, if the revisions are thorough-going and skillfully made.

Some weeks ago at the direction of the Board of the Authority, a proposed standard of domestic and farm rates was announced, which were recommended to those com-

COMPLAINANTS' EXHIBIT No. 800 (Excluded)

munities and farm organizations which might desire to enter into contracts with the Authority for power at wholesale. Those rates represent our views as to the first step in a drastic downward revision of electric rates, essential to a wider use of electricity. * * *

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Now the reasons for the existing rate schedules are many. Part is due to tradition. There is a tremendous accumulation of musty legal theory and outmoded engineering practices in the field of electric rates. Part of it is due to the fact that domestic and farm electric service is monopolistic; [fol. 3544] and it is typical of monopolies that they change their practices very slowly, if at all. In many cases it is due to pressure of an outrageous capital structure, to bad management, to lack of foresight. We believe that definite plans of the Authority now in process of execution afford the quickest means of accomplishing a thorough revision of rate schedules and rate theories throughout the country, and with it, an increase in the use of electricity. This is an essential part, as I see it, of the new national power program inaugurated by the Tennessee Valley Authority Act.

Third. Wide distribution of electric-using appliances. We then are faced with this situation: We have and are in process of constructing a tremendous pool of power for the nation, most of which is in private ownership; a considerable percentage of which is represented by Government investment. A large portion of these power facilities will be idle and unused and a burden upon the investors and on the taxpayer unless we can get electricity through to the people on a broad scale. Low rates which will promote and encourage the use of electricity is an essential part of this program. But low rates alone will not do the job. The people must have in their homes and on their farms the appliances, the devices, by which electricity is used. Par-[fol. 3545] ticularly, they must have the heavy use appliances: In the home, they must have electric ranges, electric water heaters, refrigerators, and the like, with house heating and air conditioning within the range of probability. On the farm they must have motors for many purposes, and water pumps, as well as domestic appliances.

COMPLAINANTS' EXHIBIT No. 800 (Excluded)

The existing methods of getting these appliances to the average man and woman also requires drastic revision if a widespread electrification program is carried out. It is probably accurate to say that the principal item of cost in getting these appliances into the homes and on the farms has not been the cost of materials and labor in their construction, but has been the cost of financing and selling; in other words, distribution. The 200 odd electric manufacturers of the country are equipped today to turn out the hundreds of thousands of heavy use electric appliances which the people of the country want and which, under a properly planned program, they can pay for. In fact, with proper rates, the bulk of our people literally cannot afford not to own and use such appliances. But I repeat, low rates alone are not enough. Without large-scale distribution of low-cost appliances, there will never be a widespread use of electricity. I am calling this matter of electric appliances to your attention because it should be an integral [fol. 3546] part of this national program. Anyone who leaves this factor out of consideration is not thinking this matter through.

There are difficulties in the way of effectuating a wide distribution at low cost, of standardized high-quality electric appliances which the manufacturers of this country are producing. These difficulties are by no means insuperable. While I am not at liberty to discuss the matter at this time, I would be less frank than I have a right to be if I did not say that a definite plan for this phase of the program is approaching completion, with the co-operation of many interests.

Fourth. Reduction in costs. Time does not permit of a discussion of our program looking toward reductions in operating and construction costs. Here again we need and will receive co-operation from many sources. To meet the mounting cost of complexities and of losses in transmission net-works is particularly a subject upon which the Authority hopes to make a contribution. A reduction in costs will inure to lower rates and constantly increase use of electricity.

And then the last point in this program: We must all of us begin to think in terms of an "Electrified America."

COMPLAINANTS' EXHIBIT No. 800 (Excluded)

We must keep before our minds the great potential wealth [fol. 3547] which is lying at our doors, now idle. What American people want badly enough—they get—whether it is the conquering of a wilderness, an education for every child, or a decent and orderly revision of our entire economic structure. The imagination of our people must be fired with the prospect of electrified homes. Farmers must be given a picture of what electricity can do to relieve farm life of many of its burdens. The business man must come to see the possibilities for commercial and industrial development which lie ahead, if such a program is carried out.

[fol. 3548] COMPLAINANTS' EXHIBIT No. 801 (Excluded)

TVA Press Release of November 15, 1933

Washington, Nov. 15.—Terms and conditions for the sale of electricity by municipalities purchasing power from the Tennessee Valley Authority were announced here today by David E. Lilienthal, director in charge of power development.

In making public the details of the initial TVA contract for the sale of Muscle Shoals energy, Director Lilienthal also made known the industrial and commercial rates which supplement the Authority's standard residence and wholesale rate structure made public September 15th last.

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Under this contract a user of 500 kilowatts of commercial power per month pays \$13.75; a saving of \$20.25 as compared with the present Tupelo rate.

The 20 year agreement between the TVA and Tupelo is expected to set a standard for contracts with other municipalities within transmission distance of Muscle Shoals. Besides rate schedules, the Tupelo contract carries with it certain rules and regulations applicable to all TVA customers. Among other things, Tupelo agrees:

“(a)—To administer its electric system as a separate [fol. 3549] department and not to mingle funds or accounts with those of any other of its operations.

COMPLAINANTS' EXHIBIT No. 801 (Excluded)

"(b) To keep its electric system accounts according to a system of accounts to be prescribed by Authority after conference with Contractor, which system of accounts will so far as possible be uniform with other systems prescribed and applied in other municipalities purchasing electrical energy from Authority. Authority agrees at its own expense to render advisory accounting service in the setting up and administering of such accounts.

"(c) To furnish promptly to Authority such operating and financial statements relating to electrical system operations.

"(d) To allow the duly authorized agents of Authority to have free access to all books and records relating to electric system operations.

"(e) To sell and distribute electrical energy to the ultimate consumer without discrimination between consumers of the same class, and no rate shall be charged or practice adopted which will grant a discriminatory rate, rebate or other special concession to any consumer served by Contractor. Contractor shall observe the principle that the [f6l. 3550] sale of energy for industrial use shall be a secondary purpose, to be utilized principally to secure a sufficient high load factor and revenue to permit domestic and rural use at the lowest possible rates and in such manner as to encourage increased domestic and rural use of electricity."

The schedule further provides:

"Lower Rates to Other Municipalities—if at any time during the term of this agreement Authority should supply electricity to any municipality at a lower rate than that applicable to Contractor, and such lower rate shall not be justified by different conditions of service, making the cost to such other municipality relatively less than to Contractor, such lower rate shall be made available to Contractor.

"Developmental Surcharge.—Contractor agrees not to depart from the resale rates set forth in Schedule B (resale rates) without first securing the consent of Authority: Provided, however, that in order to maintain Contractor's rev-

COMPLAINANTS' EXHIBIT No. 801 (Excluded)

enues in the developmental period in which the increased demand for power may not compensate for the greatly reduced rates provided for in Schedule B, Contractor may impose a surcharge upon those classes of consumers subject to a surcharge under the provisions of said Schedule. [fol. 3551] Contractor may initially determine and may from time to time vary such surcharge, with the understanding, however, that all revenues over those required for the appropriations set forth in Section 10 (a) herein shall be applied to the reduction or elimination of surcharges. Surcharges shall be based on a straight percentage of net bills, and shall apply uniformly to all members of classes as to which surcharges are authorized.

"Adjustment of Rates.—Should the cost of living index compiled by the Department of Labor show a decrease for six consecutive calendar months of 20 per cent or more under the index figures for the month in which this contract is signed, Contractor may in writing request Authority to agree to such a reduction in rates as the circumstances may warrant, and should such index figures show a 20 per cent or more increase for the same period, Authority may in writing request Contractor to agree to such an increase in rates as the circumstances may warrant. If within thirty days after the receipt of such a request the parties shall be unable to agree to a satisfactory adjustment, the question shall be submitted to three arbitrators, one to be appointed by each of the parties, and a third to be appointed by the two so selected. A decision of the arbitrators shall require only a majority vote, and [fol. 3552] such a decision shall be final and binding upon both parties.

"Disposition of Contractor's Revenues.—Contractor agrees to dispose of revenues from the operation of its municipal electric system in the following manner: (a) Revenues will first be used for operating expenses, after which, in the order named, revenues shall be made applicable to interest on electric system bonds and/or other indebtedness applicable to said electric system, amortization of such bonds, or other indebtedness, reasonable reserves for new construction and other contingencies, payment to the general fund of Contractor for taxes at rates equivalent to the taxes assessed against other property of

COMPLAINANTS' EXHIBIT No. 801 (Excluded)

a similar nature, and a return on Contractor's equity of not more than six per cent per annum. (b) After the appropriation of the above amounts the Contractor agrees that all remaining revenue shall be applied to reductions in the rates to consumers."

Tupelo is expected to use Muscle Shoals current on February 7, 1934, when Tupelo's contract with the Mississippi Power Company expires. The Authority will cooperate with Tupelo in encouraging a wider use of electricity, and plans an intensive demonstration in rural electrification in the heavily settled county of Lee of which Tupelo is the county seat.

[fol. 3553] COMPLAINANTS' EXHIBIT No. 802 (Excluded)

TVA Press Release of November 19, 1933

Is Electric Power Important, by Arthur E. Morgan

I have seen references in the local press to a supposed statement of mine that electric power is an unimportant incident in the Tennessee Valley Authority program. May I express my opinion on the matter. The problem of electric power is extremely important in the program of the Tennessee Valley Authority, but it ought not to continue to be so. * * *

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There are a number of fundamental needs of people which are matters of almost life and death if they are not supplied, but which ought to be supplied so freely that they seem unimportant. Air and water are such needs. A few others are roads for transportation; mail, telegraph and telephone for communication; and electric power. These fundamental needs of men are so fundamental and must be supplied on such a large organized scale that the supply of them is not a private affair but a concern of the public. It is the business of the public to supply such needs one by one until they are so well provided for that we need to think little about them, and can turn our minds to other matters.

COMPLAINANTS' EXHIBIT No. 802 (Excluded)

At present, the power issue is in the Tennessee Valley Authority region. Let us hope that in the next few years, it can become so thoroughly mastered that we need give it but little thought. Our power resources here are so abundant that an adequate supply of power for all our needs should be no more of a problem and a little more of tax than abundant and pure water supply is at present. In fact, in our rural regions, an abundant supply of power should be less difficult to secure in many cases than an abundant supply of pure water. The power program of the Tennessee Valley Authority is being worked out under the direction of Mr. Lilienthal. His aim is to bring about a time when power will no longer be an important matter to demand our time and attention, when an abundant supply will be available to all at a cost so low as not to tax the family budget. Whether that program does succeed, will depend, of course, on the cooperation of the Authority and the people of the territory.

[fol. 3555] COMPLAINANTS' EXHIBIT No. 803 (Excluded)

TVA Press Release of November 21, 1933

The Tennessee Valley Authority

Address to the National Academy of Sciences in Boston, by
Arthur E. Morgan, Chairman of the Tennessee Valley
Authority, November 20, 1933.

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*** The power program of the Tennessee Valley Authority has been worked out under the direction of David E. Lilienthal, a member of the Board, with vigor and dispatch, and I believe, in a masterful manner. The first contract for furnishing power to a municipality has recently been executed, and several hundred miles of transmission line will shortly be under construction.

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Then there is the great waste in the electric power situation. Men have a few basic needs which must be supplied as

COMPLAINANTS' EXHIBIT No. 803 (Excluded)

[fol. 3556] part of a civilized environment. One of these is an abundant supply of pure water. Other basic sources are transportation, communication and power. We shall steadily approach the time when these services are so cheaply and abundantly supplied that they fall into the background as requiring but little of our thought.

At the present time electric power is one of the live issues of social planning. Everyone is familiar with the disclosures of the Federal Trade Commission, of the widespread endeavor by secret and open propaganda to control the thinking of the nation on this issue. In a few cases where unusual indiscretion has opened the scene to the public, as in the case of the once very honorable Mr. Insull, we can see what the industry is like on the inside.

The Tennessee Valley Authority is interested in the electric power issue on several counts. First, if a case of public ownership and operation can be established, with fully open and comparable cost accounts and records, we may be provided with a "yardstick" by which we may discover what electric power actually ought to cost. The private utilities, if they are sincere in their expressed belief of the superiority of private ownership and operation, should welcome such an example.

[fol. 3557] It is not only the private utilities that will be provided with a "yardstick." Public ownership will be on trial. • • •

Another object of the TVA is to make this region and the country as a whole more fully aware of the vast possibilities of electric power for enlarging the freedom and scope of modern life in the home and on the farm. This can only come with cheap power, from which all speculation and exploitation have been removed. The electric power business is one of the simpler industries of our country. It does not compare in complexity with the shoe industry, the automobile industry or the railroad industry. No vast tribute should be paid for management and financing. Brought down to its simpler necessities, electric power should be a universal convenience, supplied as city water supplies usually are, on a basis of service and not of commercial exploitation.

Lastly, the economy of electric power in the Tennessee Valley area will depend much on large scale developments

COMPLAINANTS' EXHIBIT No. 803 (Excluded)

that are designed and operated as single integrated systems. The entire Tennessee River System, with its thousands of miles of streams, should be under one control and ownership, which means Government ownership. An example will illustrate: all along the Tennessee River power plants can [fol. 3558] be installed with a total fall of about five hundred feet. But these are "run-of-the-river plants." That is, they provide little storage, and the water must be used as it flows. At Muscle Shoals, for instance, the capacity during high water in winter may be 600,000 kilowatts, whereas, the low water of a dry summer may generate only 40,000 kilowatts. The maximum capacity of high water is fifteen times the minimum capacity at low water. Yet it is only the "prime power," or power that is nearly always available, that has much value. Now, up river on one of the main branches of the Tennessee is a power project of another sort. A high dam will produce vast storage capacity, great enough, in fact, to store a year's supply of the stream. There has been a project on foot to build a great industrial plant at this upstream site, using the power for manufacturing purposes. The control of flow would be determined by the orders received by that one plant, and by its need for power. It might be using much power, and therefore releasing much water, during the high water of winter, when there is already a super-abundance of water in the river below. During the summer the plant might be shut down and water might be stored above when it is most needed below.

[fol. 3559] If the entire system should be owned and operated as one, the situation would be very different. The entire system would be inter-connected by transmission lines. During the high water of winter the upper plant would be shut down and the water stored in the reservoir. Abundant power would be available from the river plants below where no storage is available, and where the water must be used as it comes. Then, during the summer, when the river is low and electric power scarce and most valuable, the upper plant would be operated. Not only would a large amount of power be available there, if the whole year's storage were to be used in those months, but all the water used in the plant above would have to pass through each of the plants below, all the way to the mouth of the Tennessee. By such united operation probably twice as much "prime power"

COMPLAINANTS' EXHIBIT No. 803 (Excluded)

or dependable power could be generated for a given investment, or, in other words, the power would cost half as much per kilowatt hour.

Private utility men say that they would get the same result by trading power among themselves. That, however, does not answer the question. In the original installation of an up river power plant, the investment which is justified in providing storage will be determined by whether an income will be produced by the water which is released from the [fol. 3560] reserboir, as it goes through other power plants down the river. For instance, the Norris Dam now being built by the government on Clinch River is made higher and the reservoir is made larger than would be justified by the power possibilities for the dam itself. The Norris Dam plant will be worth more as a regulator for Muscle Shoals than for the power it could generate at its own plant treated independently. The water going through Norris Dam plant will be worth twice as much at the plants below as it is at its own plant. An investment justified by the whole system would not be justified for an independent plant.

Down stream from the Norris Dam is a private power development on the Tennessee River—the Hales Bar Dam and Power Plant. The value of that private plant will be doubled by the building of Norris Dam at public expense. Only by a single organized system of water power plants for the whole Tennessee River System can the full economy be realized. With that organization, water power may cost less than half what it would if the various units should be developed independently by private companies.

Water power is to have stiff competition from steam to Diesel engine. If the Tennessee River region is to realize its possibilities in water power it cannot afford to throw away this economy.

[fol. 3561] COMPLAINANTS' EXHIBIT No. 804 (Excluded)

TVA Press Release of November 22, 1933

Washington, Nov. 22.—Sheffield, Alabama, adjacent to the Muscle Shoals hydro-electric plant, gives every indication of being the second municipality to obtain TVA power, according to David E. Lilienthal, in charge of the Authority's electrification program.

COMPLAINANTS' EXHIBIT No. 804 (Excluded)

"An agreement between Sheffield and the Tennessee Valley Authority for the use of Muscle Shoals power will be entered into as soon as certain formalities are concluded," Director Lilienthal announced today. "It had been expected that the contract would have been signed by this Thursday, but the untimely death of Mr. T. Herbert Clegg, in charge of negotiations for the Authority, will mean a little delay."

Sheffield has applied to the Public Works Administration for a loan in order to finance its own distribution plant, to be built or acquired. The franchise of the Alabama Power Company in the city has expired.

"Sheffield is very anxious to secure this power from the Authority and is ready to do all in its power to close this matter as quickly as possible," declare Sheffield's Board of Commissioners in a formal letter to Director Lilienthal. Signed by W. H. Richardson, president, and [fol. 3562] Commissioners R. R. Hill and Hoyt Greer their statement continues:

"Messrs. Lide & Adler, engineers employed by the City to negotiate with you for the purchase of power from the Authority, have conferred with your engineers in the matter of the contract for the power. In all substantial provisions of the contract there was agreement between them and only a few minor details need to be corrected before the City will sign the contract offered. These matters are detail only and will not materially affect or change the contract offered."

The terms of the contract under consideration are of the same character as those in the contract signed on November 11, by the City of Tupelo, Mississippi. A lower wholesale rate prevails, since no transmission line is involved. Retail rates will be much lower than those now in effect.

[fol. 3563] COMPLAINANTS' EXHIBIT No. 805 (Excluded)

TVA Press Release of December 5, 1933

Officials of the Tennessee Valley Authority today conferred with John L. Neely, Jr., newly-appointed coordinator between the TVA and the Civil Works Administration, to

COMPLAINANTS' EXHIBIT No. 805 (Excluded)

complete the program for creating new jobs for approximately 16,500 men in the Tennessee Valley, starting within a week.

The CWA already has turned over \$3,343,500 to the Authority for emergency work in the portions of seven states comprising the basin. These are Virginia, North Carolina, Tennessee, Alabama, Georgia, Mississippi and Kentucky.

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In preparation for construction of rural electrification lines, men are expected to start work this week in five counties in Mississippi and one in Alabama. They will cut trees for poles and dig holes in which to set them, principally along the rights-of-way of county roads.

[fol. 3564] COMPLAINANTS' EXHIBIT No. 806 (Excluded)

TVA Press Release of December 5, 1933

The Tennessee Valley Authority and Electric Power, by
Arthur E. Morgan

Chairman of the Tennessee Valley Authority. Address to the American Institute of Electrical Engineers (New York Section) at the Engineering Society's Building New York City, December 4, 1933, 8:00 P. M.

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The Authority has in view a policy which would lead to great economy in hydroelectric power generation. Water power in the future may have very stiff competition from [fol. 3665] both steam and Diesel engines. Whether these three million kilowatts of potential water power in the Tennessee river system can be developed in competition with other sources of power will depend upon whether every possible economy is achieved in its development. If the cost of generating water power should be half a cent per kilowatt hour it may lose out before steam or the Diesel engine. If the cost of water power can be reduced

COMPLAINANTS' EXHIBIT No. 806 (Excluded)

to a quarter of a cent per kilowatt hour it may have a relatively clear field.

Without suggesting any particular level of unit cost, I venture the opinion that if the water power development of the entire Tennessee river drainage area of 40,000 square miles can be given a single unified ownership and control, the unit cost of power may be no more than half of what it would be with divided ownership and management. Let me illustrate—

Near the East boundary of Tennessee is a dam site which will provide vast storage capacity for an area of very heavy rainfall and run-off of a few thousand square miles. From this point down the Tennessee River to its mouth is a fall of roughly one thousand feet, nearly all of which can be used for generating power. A plan has been proposed by [fol. 3566] a private company for generating power at the upper site with a dam perhaps 200 feet high, and to administer this power plant as an independent industrial undertaking, perhaps for the operation of a large manufacturing plant. If this is operated as an independent unit it will be regulated with a view to its own needs. In determining how much storage can be economically provided in the original construction, only the value of storage to that plant alone can be considered. The management cannot invest money in this upper plant on the ground that the investment would be justified in the use of stored water at each of the eight or ten plants down below, in which it has no financial interest. Some of these lower plants may not yet be built.

If there were only one up-river plant and one down river plant some arrangement might conceivably be worked out, but with eight or ten down-river plants which have little or no storage, and twenty or thirty up-river plants on half a dozen tributaries, each with storage which could be released, all prospect for voluntary unified and coordinated control fades away. Each plant would be run when its owner should choose, without regard to the abundance or deficiency of water at plants below or on other tributaries. Trading of water and even exchange of power, would become [fol. 3567] cumbersome and relatively ineffective.

Now consider what would be accomplished by a single unified system, thoroughly interconnected by transmission

COMPLAINANTS' EXHIBIT No. 806 (Excluded)

lines and controlled from a single office. During wet seasons or wet years the storage dams would be closed until their reservoirs were filled, and all power would be developed from plants having no storage, or inadequate storage. If rains should be heavier on one tributary than on another, the full reservoirs would be drawn upon. If some reservoir had only enough capacity to store the flow for a few months, its supply might be used ahead of a reservoir that would store one or two years run-off. If during the low water of a summer a freshet should occur on an uncontrolled tributary, that freshet flow could be used to the utmost, and an equivalent value in stored water would be saved.

In any single reservoir it seldom pays to store water for more than two years in preparation for a dry cycle, but in a large system the exceptionally cheap reservoir space could be used for that purpose, thus giving additional security against extreme drouth.

On some of the smaller tributaries of the Tennessee sometimes at high elevations there are reservoir sites of very large capacity, but without water enough to fill them. [fol. 3568] These cheapest and most capacious sites could be developed by building dams, and then all surplus power could be used to pump water up hill into them from the Tennessee river. For off peak hours at night, for a few wet months during the year, and for intermittent wet seasons, all surplus power could be used in pumping water into these high reservoirs which would have power plants to be used during peak loads or for a standby supply.

With such a single integrated system under a single control, the full hydroelectric power possibilities could be realized, and the cost per unit of private power might be not more than a half or even a third of the cost of separately owned and operated plants. In this process navigation and flood control also would be provided for, with substantial contributions to the low water flow of the Ohio and the Mississippi.

I hold that such unified control and operation implies government ownership and operation. It may be argued that all this could be accomplished under private ownership and operation. But I hold that it should not be in private hands unless that should be necessary to avoid gross inefficiency and corruption of the spoils system.

COMPLAINANTS' EXHIBIT No. 806 (Excluded)

[fol. 3569] The control of this great electric power system by a private corporation would give economic power over the people of the region which no self-appointed men ought to hold. Such management and operation would of necessity be governmental and public in its nature, whether privately or publicly owned. It would be necessary to exercise the right of eminent domain, and to have control over the economic life blood of a vast region. Public regulatory bodies have not proved their ability to control such vast aggregations of economic power.

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Just as an adverse balance of foreign trade tends to bankrupt a nation, so the constant drain from a municipality of payments to a foreign owned utility tends to economic impoverishment. Given administration of equal quality, the ideal status of a city utility is that it is fully amortized and is owned by the public it serves. Regional independence from a perpetual drain is no less important for an area as large as that of the Tennessee Valley Authority than for a city. In good economics only that should be imported which cannot reasonably well be produced at home. Absentee ownership of utilities is an unsound policy unless there are determining reasons for it. One of the purposes of the [fol. 3570] Tennessee Valley Authority to provide a case in public ownership and operation and to discover wherein lies the mysterious difficulty in utility operations. Since an important municipal system like that of Tacoma has not disclosed those difficulties, a trial on a larger scale seems desirable.

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... We need a new psychology about electric power. We need to think of it as an ever present servant, practically unlimited in quantity and convenience. For ordinary purposes we should be able to practically forget its cost as we do water in the household. This should be especially true in the Tennessee Valley Authority, where a great surplus of intelligent and efficient labor is available to use a great supply of raw materials in the development of a well nigh limitless supply of power.

COMPLAINANTS' EXHIBIT No. 806 (Excluded)

The first restrained and modest steps toward these results are being taken by the Tennessee Valley Authority. The power program of the Authority is in the hands of Mr. David E. Lilienthal, one of the directors. Contracts have been made for furnishing electric current to one municipality in Mississippi, and two in Alabama. Various other requests have been received from those states and from Tennessee, Georgia and Kentucky. It is the hope of the Authority to so stimulate the use of electric power that its activities [fol. 3571] shall be a stimulus and not a deterrent to the whole industry. In setting rates, an effort has been made to include every legitimate item of cost, including interest, amortization and taxes. There is an honest effort to make costs genuinely comparable to those of private industry. The Authority is refraining from any campaign to take customers from private utilities. Prospective customers must take the initiative. Genuine effort is being made to disturb security holders as little as possible. Statements spread broadcast by the utilities themselves among the small holders of their securities during the consideration of the TVA bill in Congress, to the effect that if the Bill should pass the utilities would be ruined, have perhaps been believed by some persons. The Authority cannot, of course, be held responsible for the unfortunate results of the pessimistic forebodings of this propaganda of the private companies. The power program of the Tennessee Valley Authority is an effort in a limited area to bring about a cheap and ample supply of power on a self-supporting basis, as one of the several conditions necessary to an enlightened and wholesome economy in the region it is trying to serve.

[fol. 3572] COMPLAINANTS' EXHIBIT No. 807 (Excluded)

TVA Press Release of December 12, 1933

The first crew of CWA workmen assigned to TVA Saturday began surveying and staking rural electrification lines in Lee county, Mississippi, of which Tupelo is the county seat, the Tennessee Valley Authority announced.

Tupelo was the first city to contract with the Authority for power from Wilson dam. An aggressive campaign is now

COMPLAINANTS' EXHIBIT No. 807 (Excluded)

being waged in Tupelo and Lee county to increase the use of electricity, particularly by farm families.

As soon as labor crews can be assembled, electric lines will be extended in four other Mississippi Counties, according to Guy W. Thaxton, TVA engineer in charge of development work in Northern Mississippi.

Rural lines in these counties will be constructed as rapidly as the projects can be set up and approved by Greek L. Rice, Chairman of the Civil Works Administration for Mississippi.

John L. Neely, Jr., TVA-CWA coordinator, will confer with Mr. Rice Tuesday in Jackson, Miss., relative to these projects. On Monday Mr. Neely will discuss similar matters with Algernon Blair, CWA chairman for Alabama, in Montgomery.

[fol. 3573] While the routes are being surveyed and staked, CWA workers are cutting the poles, digging holes in which to set them, and making ready to string the wires. Most of the new lines run along county road rights-of-way and penetrate areas heretofore without electricity.

[fol. 3574] COMPLAINANTS' EXHIBIT No. 808 (Excluded)

TVA Press Release of December 18, 1933

The Tennessee Valley Authority has decided that development of the Aurora Dam on the Tennessee river should be a part of the Authority's plan for an integrated power program embracing the entire Tennessee river basin. This decision has been forwarded to private interests which sought control of the Aurora dam site.

The Aurora project is located in Kentucky approximately 44 miles up stream from the confluence of the Tennessee and Ohio rivers at Paducah, Kentucky.

"From an engineering standpoint Aurora dam is being studied by the Authority to determine whether it should not be one of its next projects," Chairman Arthur E. Morgan said. "The Tennessee Valley Authority, however, does not feel justified in starting another project with its present funds. We have only enough to finish one job and make a good start on Wheeler dam.

COMPLAINANTS' EXHIBIT No. 808 (Excluded)

"The value of a power dam is roughly the value of the least amount of power which that project can produce. For example, during the high water season there would be little or no power at Aurora dam because the Ohio river is so [fol. 3575] high that it backs up nearly to what would be the top of the dam. On the other hand, Muscle Shoals in high water has a great excess of power. The two units and Norris Dam supplement each other. For the Tennessee Valley Authority to have an effective unit of power, it should control both Muscle Shoals and Aurora Dams. Operated as a single private unit Aurora dam would have much less value because it would have little, if any, 'prime' power, or power which is available without interruption during high or low water."

[fol. 3576] **COMPLAINANTS' EXHIBIT No. 809 (Excluded)**

TVA Press Release of December 20, 1933

Sixty men have started constructing the 17-mile transmission line that will carry power from Wilson dam, Muscle Shoals, Ala., to the site of the new Joe Wheeler dam, the Tennessee Valley Authority announced today.

Work at present consists of clearing the right-of-way and digging holes for poles. It is planned to complete the line by January 1, 1934, and begin furnishing Wilson dam power for construction of the Wheeler dam.

Terminal connections already have been made at the Wilson dam sub-station for the line which, after completion of Wheeler dam, will serve as an auxiliary tie transmission line between the two dams. It will also be used as a feeder for rural electrification lines along its route.

Simultaneously, the Authority announced that CWA workmen, directed by TVA engineers, are making rapid progress in extending rural electrification lines in Northern Alabama and Mississippi. In Lauderdale county, Alabama, 74 CWA men are at work, while in Alcorn county, Mississippi, 30 men are employed in erecting county lines.

[fol. 3577] In addition, many farmers are using their spare time to cut poles and dig holes so as to be ready to

COMPLAINANTS' EXHIBIT No. 809 (Excluded)

cut in on the Tupelo, Miss., transmission line when the Authority begins delivering current there February 7, 1934.

Intense interest is being shown by farmers of Lee County, of which Tupelo is the county seat. They have formed a county-wide organization, with active units in each of the county's 26 school districts, and a membership of 2,000. Efforts to increase the use of electricity in the county seem certain of success due to the splendid voluntary response of the people to the Authority's program.

[fol. 3578] COMPLAINANTS' EXHIBIT No. 810 (Excluded)

TVA Press Release, of December 20, 1933

The creation of Electric Home and Farm Authority by order of President Roosevelt is the outgrowth of negotiations instituted two months ago by the Tennessee Valley Authority with the Electric manufacturers of the country, and with the principal electric utilities operating in the Tennessee Valley area.

The next step in the development of the cooperative program is being worked out in conferences in New York the balance of this week between a special committee representing the National Electric Manufacturers Association, and Director David E. Lilienthal and General Solicitor William A. Sutherland representing the Authority.

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In a statement today Director Lilienthal, in charge of the Authority's power program, said:

"The home or the farm of the family of modest income has never had the benefit of a general use of electricity. [fol. 3579] In the Tennessee Valley, although there are vast sources of power available, the people have had to use electricity sparingly. Two barriers have prevented a full enjoyment of the benefits of this great natural resource: prohibitive rates for energy, and the high cost of electric appliances. Electric Home and Farm Authority plans to remove those barriers in the Tennessee Valley.

COMPLAINANTS' EXHIBIT No. 810 (Excluded)

"The consuming public has been suffering from an impasse which the electric industry has been unable or has lacked the leadership to break. The prevailing high rates for electricity has stood in the way of a more general use of electric appliances. In turn, the high cost of appliances has prevented a greater use of electricity, which would mean lower rates. Thus, the electric utilities and the appliance manufacturers have been standing in their own and in each other's light. In this situation government leadership is essential. The agency set up by the President in the Tennessee Valley states, if it receives the wholehearted cooperation of all interests, can break this 'vicious circle', and, with injury to no one, reduce the cost of electricity and electrical appliances both, thereby bringing the comforts and conveniences of electricity into many homes."

[fol. 3580] COMPLAINANTS' EXHIBIT No. 811 (Excluded)

TVA Press Release of December 20, 1933

David E. Lilienthal, Director of the Tennessee Valley Authority in charge of its power program, tonight issued the following statement in explanation of the purposes of the Electric Home and Farm Authority, Inc., just created by Executive Order of President Roosevelt.

"The objective of this program is a wider and greatly increased use of electricity in the homes and on the farms in the seven states of the Tennessee Valley. In order to carry out the program there must be a broad scale distribution of very low cost standard quality electric using appliances and concurrently a revision downward of electric rates. The new agency is based on a cooperative program in which the federal government, the electric utilities both publicly and privately owned, the electric manufacturing industry and dealers will participate through the Electric Home and Farm Authority, Inc.

"It is proposed that the federal government participate in this program in the following ways:

"1 By assisting in financing the consumer in purchasing [fol. 3581] standard electric equipment at very low prices.

COMPLAINANTS' EXHIBIT No. 811 (Excluded)

"2. By securing reductions in electric rates by agreement with the utilities publicly and privately owned so as to make use of this equipment feasible for the average householder and farmer.

"3. By engaging in educational work and research to further lower the cost of electric equipment and to make it better adapted to the needs of the average home and farm.

"Electric appliances are now sold by regular dealers for the manufacturers, by hardware and department stores, and by electric utilities. The program does not contemplate a disruption of these outlets. Each dealer will, of course, continue to exhibit and sell any lines of electric appliances he desires but he will also have an opportunity to sell the low-priced appliances which this program is expected to create. The program will stimulate the dealers' general business.

[fol. 3582] COMPLAINANTS' EXHIBIT No. 812 (Excluded)

TVA Press Release of December 28, 1933

Organization of farmers of six northeast Mississippi Counties into rural electric power associations, to buy current at wholesale from the Tennessee Valley Authority, will be conducted by the agricultural extension service of Mississippi State College, Starkville, it was announced today by the TVA.

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Rural electric transmission lines are now being built in Mississippi, CWA funds being used for labor and TVA money for the purchase of poles, transformers, wire and other transmission line equipment. The county associations, incorporated under Mississippi laws, will retail TVA power to their members on a no-profit basis. Resale rates, however, will provide for repayment of the Authority's cash outlay in constructing the lines.

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COMPLAINANTS' EXHIBIT No. 812 (Excluded)

A similar plan for rural electrification is being worked out by the Tennessee Valley Authority in several north west Alabama counties as rapidly as the proper cooperation can be obtained.

[fol. 3583] COMPLAINANTS' EXHIBIT No. 813 (Excluded)

TVA Press Release of January 5, 1934

The Tennessee Valley Authority and Alabama Power Company, Tennessee Electric Power Company, Mississippi Power Company and Georgia Power Company today entered into a comprehensive agreement, after extensive negotiations extending over the past three months, under which the Tennessee Valley Authority acquires electric facilities in a substantial territory in three states in which to conduct its power operations. Under the agreement the President's power "yardstick" is set up in initial form, and immediate Muscle Shoals power service is provided to householders and farmers in the Tennessee Valley. Six months after the creation of the Valley Authority a market has been provided for all the power resources of Muscle Shoals, after a dozen years of plant idleness.

The contract, which will terminate as soon as power is available from Norris Dam, contains the following major provisions:

1. Purchase by the Authority of approximately \$3,000,000 of property from the Alabama Power Company, Mississippi Power Company and Tennessee Electric Power Company, by which the Authority obtains immediate urban and rural markets in Mississippi, Tennessee and Alabama.

[fol. 3584] 2. Sale of municipal systems in the Mississippi counties affected to the Authority.

3. Sale of municipal systems in the Alabama counties affected to the municipalities by the Alabama Power Company.

4. Option is granted the Authority to purchase municipal systems in Tennessee counties affected.

5. An agreement to reduce electric rates by the Tennessee Electric Power Company to the level recently established by the Georgia Power Company.

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COMPLAINANTS' EXHIBIT No. 813 (Excluded)

"The size of the area which the Authority determined to acquire, was determined in a large measure by the amount of power it now has available, that is, by the existing firm power capacity of the Muscle Shoals plant. Until further power is available to the Authority by the completion of Norris Dam (estimated to be ready in three years) only those communities could be served which in the aggregate would not exceed in their power demands our capacity to furnish immediate and continuous electric energy. The area ceded by this contract, together with the city of Knoxville, which recently voted to become a wholesale purchaser of Muscle Shoals power, added to the requirements of rural electrification projects now under way, and demands in territory outside the ceded area, will absorb virtually all of the power which Muscle Shoals can produce, allowing a safe margin for increased use of electricity which the Authority's low cost appliance program is certain to induce. The precise boundaries of the area chosen were determined by the physical location and sizes of existing transmission centers."

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"The contract carries forward one of the Authority's objectives of effectuating lower rates to all consumers in the Tennessee Valley area. Rate reductions of a substantial character have been announced recently in Alabama and Georgia on the properties of the companies parties to this arrangement. As part of this contract the utilities further agreed with the Authority to reduce rates throughout their territory in the State of Tennessee. These new rates represent a reduction of 28 per cent under the 'inducement' rate and 15 per cent under the 'immediate' rate, with a total saving to householders of \$415,000 annually."

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[fol. 3586] Reductions in Rates.—The Tennessee Electric Power Company agrees to reduce the domestic electric rates to the level recently established by the Georgia Power Company. These rates will result in a reduction of \$415,000 in bills for domestic service in all territory served by the Tennessee Electric Power Company.

[fol. 3587] COMPLAINANTS' EXHIBIT No. 814 (Excluded)

TVA Press Release—Undated.

Under the contract between the Tennessee Valley Authority and the Commonwealth and Southern Corporation of January 4, the Authority will acquire all of the transmission and distribution facilities of the Mississippi Power Company in the following counties in Mississippi: Pontotoc, Lee, Itawamba, Union, Benton, Tippah, Prentiss, Tishomingo and Alcorn. The Authority will be in position to serve all towns and communities in this territory. In addition, the Authority has the right to serve all rural customers and rural consumer organizations in Monroe County not now served by Mississippi Power Company. The Authority has the right to contract with other municipal consumers outside of these counties which are not now customers of the Mississippi Power Company.

In the state of Alabama, the Authority will acquire all of the property, excepting municipal distribution systems, of the Alabama Power Company in the counties of Lauderdale, Colbert, Lawrence, Limestone, Morgan, the northern half of Franklin and some of the northern part of Cullman. The Authority will be able to serve such municipalities in these counties as construct or acquire their own distribution systems. In the event that municipalities fail to construct or acquire distribution systems, the Authority will serve the Alabama Power Company which will operate municipal distribution systems. However, the Alabama Power Company has agreed to make every effort to agree with municipalities on a price at which to sell the municipal distribution systems. In no event will the negotiations and transfer pursuant to the contract cause any discontinuity or interruption of service to users of electricity.

In the state of Tennessee, the Authority will acquire properties of the Tennessee Electric Power Company, excluding distribution systems, in the counties of Anderson, Campbell, Morgan, Scott, and the west part of Claiborne. The Authority has the right to serve rural customers and rural consumer organizations in the counties of Rhea, Roane, Meigs and the western part of McMinn which are not now customers of the Tennessee Electric Power Company.

COMPLAINANTS' EXHIBIT No. 814 (Excluded)

In general, the Authority retains its right to sell electric energy to any and all municipalities not only within the territory acquired by it, provided that such municipalities [fol. 3589] are not at present served by any company in Commonwealth and Southern Systems, but also all other municipalities, without restriction as to territory, so long as such municipalities are not now served by one of the following companies: Alabama Power Company, Tennessee Electric Power Company, Mississippi Power Company and Georgia Power Company.

In addition to the above, the contract provides for intertie connections to supply up to 25,000 kilowatt capacity for rural and industrial use outside of the contract territory to customers not now served by the power companies above named.

[fol. 3590] COMPLAINANTS' EXHIBIT No. 815 (Excluded)

TVA Press Release of January 6, 1934

Business and Government in the Tennessee Valley

Text of Paper by David E. Lilienthal, Director and General Counsel, Tennessee Valley Authority Read Before American Academy of Political and Social Science in Philadelphia, Penn., January 5, 1934

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The public utility business has long borne a different relationship to government from other businesses not so peculiarly affected with a public interest. The whole community relies so completely upon public utility service that for generations the government has found it necessary and appropriate to regulate the rates and services of these quasi-public agencies. During the past quarter of a century, the regulation of public utilities has been vested in state commissions. Through these commissions the force of government was exerted upon public utilities to the end that [fol. 3591] the rates charged consumers should be reasonable, and that financial practices injurious to the consumers and to the public investors should be prevented.

COMPLAINANTS' EXHIBIT No. 815 (Excluded)

There has been a growing feeling that this method of expressing the regulatory relation of the government to the public utility business was inadequate to meet the needs of the situation. These critics insisted that commission regulation, by and large, had been ineffective; that in many states instead of the regulators regulating the utilities, the utilities were regulating the regulators; that financial abuses of the most lurid sort had taken place despite regulation; that the processes of regulation were too slow; and that the great technological savings in the field of electricity had not been passed on to the consumers.

The power policy written into the Tennessee Valley Authority Act represents an attempt to regulate public utilities not by quasi-judicial commissions, but by competition. The Act definitely puts the Federal government into the business of rendering electric service. The Authority is required to acquire a market, to set up an area in which to conduct its operations. The results of these operations in this limited area are intended to serve as a "yard-stick" by which to measure the fairness of the rates of private utilities [fol. 3592] ties, and to prevent destructive financial practices by private utilities. In carrying out this competitive relation between the Federal government and the private business of electricity, the wastes of competition are to be eliminated, and the regulatory function of competition emphasized. In other words, duplication of facilities and competition in the same community is to be avoided. There is not time to discuss in detail the principles which the Authority has adopted to govern its operations in this new relation as a competitor of a public business. Those principles have been set out by the Authority in its Power Policy, and have been discussed in some detail in various public statements.

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In common with other recently created agencies of government, the Tennessee Valley Authority has a definite duty and a definite role to play in this new function of government as a stimulating and coordinating force. There are a number of illustrations in the work of the Tennessee Valley Authority of this need of government stimulation. The most recent, and perhaps the best illustration, is afforded by the

COMPLAINANTS' EXHIBIT No. 815 (Excluded)

creation a few days ago, by order of President Roosevelt, of a subsidiary of the Tennessee Valley Authority, a Delaware [fol. 3593] corporation known as Electric Home and Farm Authority. The occasion for the creation of this agency and a brief analysis of its functions will show how the government can act as a stimulator and coordinator in its relation to business.

In the Tennessee Valley there are great actual and potential sources of electricity. Private and publicly-owned agencies now have developed generating capacity from thirty to forty per cent in excess of existing requirements. Additional generating capacity is being developed with public funds. The same situation is true throughout the country. The people need and want this electricity in their homes, on their farms, and in their places of business, but as a matter of fact the use of electricity in the United States has been extremely limited. The average domestic consumer throughout the United States uses about 50 kwh. of energy a month, a niggardly and parsimonious use of a great resource.

Two barriers have stood in the way of a widespread use of this liberating force. The first and most important barrier is the rates charged for electricity. These rates have been too high to permit of the general use of electricity. As a result the use of electricity has been restricted and has never, except in unusual communities, reached the proportions [fol. 3594] justified by the universal need and effective demand for this service.

The electric power industry has consistently stated that if the consumers would use more electricity the rates could be greatly decreased. One leader among the utility executives, for example, pointed out recently that his most profitable customers were those who, with an extensive use, are charged a rate of less than 1.7 cents per kwh. as compared with the average user's rate of 4½ cents per kwh. and the small users' rate of 8 cents per kwh. Increase in use is essential to bring down unit costs. And yet to increase the use, the rates to the consumers must be decreased.

Not only the high cost of electricity, but the relatively high cost of electric-using appliances has constituted a serious

COMPLAINANTS' EXHIBIT No. 815 (Excluded)

barrier to the increased use of electricity. The labor and material costs of electric appliances have always been but a fraction of the total retail price. Volume production could have brought greatly decreased prices to the ultimate consumer, but with electric rates on a luxury basis, volume production of electric appliances in this field has never been accomplished.

Here we have a picture of a complete business stalemate. [fol. 3595] The electric utilities' position is that until the use of electricity is greatly increased, the rates cannot be drastically decreased. Nor will the use of electricity be greatly increased, they urge, unless electric-using appliances come into general use. The general use of electric appliances on the basis of present prices is concededly impossible. The electric appliance manufacturers, on the other hand, say that unless electric rates come down, volume production of electric appliances is impossible, and without volume production of electric appliances the per unit cost of manufacture and distribution cannot be substantially reduced. Electric utilities, electric manufacturers, and consumers all suffer from this vicious circle: the electric utilities, because they have great excess capacity which is idle and against which fixed charges are continuing to pile up; the electric manufacturers, because they have idle capacity on which overhead continues to be incurred. Here was an opportunity for government, represented by the Tennessee Valley Authority, to exercise its catalytic function.

By Executive Order, the agency known as Electric Home and Farm Authority was created to cooperate with business in an effort to break this impasse and to bring the benefits of a wide use of electricity at low cost to consumers through [fol. 3596] out the seven Tennessee Valley States. Electric Home and Farm Authority was created to remove these barriers to a wide use of electricity and to a more stable and prosperous business for the electric manufacturers and the utilities. The plan, in brief, is as follows: the manufacturers of electric equipment have indicated their willingness to participate in a program of producing certain types of standard quality, low-cost electric-using appliances. These will be offered for sale by the existing dealer outlets, at prices very substantially lower than any heretofore known. These manufacturers will cooperate with Electric Home and

COMPLAINANTS' EXHIBIT No. 815 (Excluded)

Farm Authority in certain research and educational activities designed to bring home to people of the area the most economical and most satisfactory ways of using electricity in the home and on the farm. Further, Electric Home and Farm Authority will arrange for a more satisfactory basis for the financing of electric appliances. While the Reconstruction Finance Corporation will, in effect, guarantee ten million dollars of consumer paper, we are confident that the actual credit will come through the commercial banking system, which has been looking for just such high type of consumer paper, consistent with the needs for liquidity. The cost of financing to the consumer will be greatly reduced, [fol. 3597] due in considerable part to a cooperative arrangement whereby collections will be made by the utility company on the consumer's electric bill rather than through a separate and duplicating medium.

Negotiations are being carried on with electric companies operating in the area, looking toward a reduction in electric rates which will make it feasible for people of average and low income to use these electric appliances. Evidences of cooperation in this direction on the part of power companies have been most reassuring. They foresee that if this program is successful, there will be a great increase in the use of electricity, which will make for lower unit costs. The Tennessee Valley Authority, within the sphere of its own power operations, is setting rates for domestic and rural service which we believe will demonstrate not only the social desirability but the business wisdom of radically reduced electric rates. With those reductions in electric rates, one of the principal barriers to the use of electric appliances will be removed, and general, widespread use of electricity will become feasible.

[fol. 3598] COMPLAINANTS' EXHIBIT 816 (Excluded)

TVA Press Release—Undated

Washington, D. C., January 20, 1934.—Organization of the President's new Electric Home and Farm Authority, Inc., was effected late yesterday at a meeting of the incorporators at the Washington offices of the Tennessee Valley Authority at which time these officers were elected: David

COMPLAINANTS' EXHIBIT 816 (Excluded)

E. Lilienthal, general counsel of the Tennessee Valley Authority and director in charge of the TVA power program, president; Arthur E. Morgan, chairman of the TVA, vice president; Francis J. Carr, controller of the TVA, treasurer; Dr. Harcourt A. Morgan, a director of the TVA, secretary, and William A. Sutherland, solicitor of the TVA, counsel.

Pursuant to the Executive Order of December 19, 1933, which authorized the Electric Home and Farm Authority, the directors of the Tennessee Valley Authority are also directors of the new body—the Messrs. Morgan and Lilienthal.

The Board of directors of the Electric Home and Farm Authority authorized issuance of 10,000 shares of capital [fol. 3599] stock of the new corporation, with a par value of \$100 per share, as provided in the Executive Order, and also authorized execution of a contract with the Reconstruction Finance Corporation looking to the setting up of \$10,000,000 of credit in connection with the Tennessee Valley electrification program.

The papers of incorporation, filed in Delaware, provide a life of seven years for the Electric Home and Farm Authority and list among the new corporation's objects and duties the following:

“To advance the general economic welfare of the nation by developing and fostering the increased use of electrical power through the reduction of the cost thereof to the consumer and through the reduction of the cost and price of electrical equipment and appliances; to aid in the distribution of electric appliances and equipment by financing the purchase thereof through the lending and advancing of money, extending of credit and guaranteeing of obligations of individuals, firms, corporations and others, upon the security of mortgages or other liens upon or claims against electrical appliances and equipment, and in general to carry on in connection with such financing a chattel mortgage-loan business; to cooperate with any Federal agency or branch of the Federal Government, or with any of the several States, [fol. 3600] or subdivisions or agencies of such states, or with cooperative or other organizations, or with private corporations or associations, and to make such studies, experi-

COMPLAINANTS' EXHIBIT 816 (Excluded)

ments or demonstrations as may be necessary and suitable to advance and foster an orderly and proper physical, economic and social development in any of the several states by means of the use of electricity or electrical power; to make such surveys and general plans for the use of electricity and electrical appliances and equipment as may be useful to Congress and to the several States in guiding and controlling the extent, sequence, and nature of development which may be equitably and economically advanced through the expenditure of public funds or through the guidance or control of public authority; to perform any and all functions, and exercise any and all powers which may be duly delegated to it under and pursuant to the National Industrial Recovery Act, approved June 16, 1933, and any amendment or amendments hereafter made to said Act.

"To manufacture, buy, sell, deal in, and to engage in, conduct and carry on the business of manufacturing, buying, selling and dealing in electrical appliances and equipment and in goods, wares and merchandise of every class and description necessary or useful for the operations of the Corporation."

[fol. 3601] COMPLAINANTS' EXHIBIT No. 817 (Excluded)

TVA Press Release of January 20, 1934

"The Electrification of the American Home"

(Address by David E. Lilienthal, Director and General Counsel of the Tennessee Valley Authority to be Delivered over the Columbia Broadcasting System, National Radio Net Work from Station WJSV, Washington, D. C., on Saturday, January 20, Starting at 2:30 P. M. E. S. T.)

I want to talk to you this afternoon about that which I suppose is closest to the heart of every man and woman—the home. I want to tell you of some of the things which your Federal Government is doing in the field of electricity to make your home more convenient and more comfortable; what it is doing to lighten the labors of the millions of women who have the responsibility of guiding and caring [fol. 3602] for the home. More specifically, I shall speak

COMPLAINANTS' EXHIBIT No. 817 (Excluded)

of the work the Tennessee Valley Authority is doing to electrify the American home.

It was six months ago, as many of you will recall, that upon the urgent recommendation of President Roosevelt, Congress created a publicly owned corporation known as the Tennessee Valley Authority. To this new agency many duties and powers were given. To it was transferred the famous government-owned hydro-electric plant at Muscle Shoals. One of the Tennessee Valley Authority's principal duties was to extend and broaden the use of electricity in the homes and on the farms, particularly in the seven states of the Tennessee Valley. By experiments and demonstrations, the Authority was to act as a spur in hastening the time when electricity would be widely and generously used in making every home more comfortable and convenient.

The Tennessee Valley Authority is now employing thousands of men, and spending millions of dollars in the construction of two great power dams and a 230 mile electric transmission line. But what we are constantly keeping in mind in this electricity program is not dams, or generators, or lines, but the every-day needs and desires of the men, [fol. 3603] women and children of the Tennessee Valley Authority. We have devised practical ways and means to make electricity available at rates so low as to be within the most modest budget. With the approval and support of President Roosevelt a plan has just been worked out which will make it possible for most housewives in the Tennessee Valley to have in their homes many of the labor saving electric appliances, and thus to enjoy the comforts and conveniences which electricity brings.

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We all know what a transformation was wrought in the American home when the electric bulb replaced the kerosene lamp. Many of you who are home makers know what this has meant in increased convenience, comfort and safety, and in relieving women of tiresome duties. Twenty million housewives now have electric lights in their homes, but only a small percentage of these have the other equally important advantages which electricity brings. Only a few have the advantage of electric cooking and of electrically

COMPLAINANTS' EXHIBIT No. 817 (Excluded)

heated water; relatively few enjoy the benefits of such other mechanical aids to the housewife as electric refrigeration.

The housewives of the country use an amazingly small quantity of electricity. The average use of electricity by [fol. 3604] the domestic user for the country as a whole is only about 50 kilowatt hours a month. This means that electricity in the home is still limited principally to lighting. It means that the average home is still barred from the almost limitless advantages of this great national resource. There is no sound reason why this condition should exist. It is part of the job of the Tennessee Valley Authority to see that this condition should not continue.

There is no scarcity of a supply of electricity. The sources of electricity are abundant. We are convinced that the principal barrier to a wider use of electricity by the American housewife is the rates which are charged for electricity. We believe that, before the American home can be electrified, the rates charged in the country generally must be substantially and drastically reduced. And we believe further, that such reductions in rates will so greatly increase the sale of electricity that these reductions will be beneficial to the electric business.

Drastically lower rates for electric service is the first step toward a wider use of electricity. The Tennessee Valley Authority is proceeding to put such substantially lower rates into effect in the area in which it is to distribute [fol. 3605] Muscle Shoals Electricity. These rates proposed by the Authority are based upon a consideration of all costs, including taxes, and will, we believe, justify themselves on a business basis. The Authority's electric rates carry a maximum charge of 3 cents per kilowatt hour, and, for the general user, an average of less than 2 cents per kilowatt hour. For example, a home using 300 kilowatt hours, or six times the national average use, a month, would be charged \$5.50 per month. This expenditure of \$5.50 would ordinarily cover the use of lights, electric refrigerator, electric range, vacuum sweeper, washing machine, toaster, percolator, iron, radio, and other miscellaneous electric appliances.

In addition to rate reductions to those housewives who are served directly or indirectly with Muscle Shoals Electricity, the Tennessee Valley Authority has recently been able to induce privately owned utilities, operating in the

COMPLAINANTS' EXHIBIT No. 817 (Excluded)

area to make very substantial rate reductions to their consumers.

We realize, of course, that low rates for electricity alone will not accomplish the goal of an electrified home. Electric appliances must be used. At the present prices and terms of these appliances, thousands upon thousands of families [fol. 3606] of modest income are unable to take advantage of these low rates for electricity. To meet this situation the Tennessee Valley Authority, with the cooperation of the great electric manufacturing industry, is working out a plan whereby standard, high quality electric appliances will be available at prices much below those now charged, and the early installation of such equipment into thousands of homes made feasible. On December 19th, President Roosevelt issued an executive order creating an agency through which the Tennessee Valley Authority will carry this appliance program forward. It is called: Electric Home and Farm Authority, and its articles of incorporation were filed today. At present the corporation has funds to operate only in the seven Tennessee Valley states.

The future possibilities for use of electricity in the home are almost limitless. The Tennessee Valley Authority's program has already stimulated the inventive genius and practical resourcefulness of electrical engineers. The designing rooms and experimental laboratories of the manufacturers are now humming with activity. Almost unbelievable advances in the electric home equipment are being made and may be ready for announcement in the coming [fol. 3607] month. This remarkable progress is the best possible news to housewives, and to everyone who enjoys a comfortable place to live.

Briefly, this is the way the plan will work:

Mrs. Jones who, let us say, lives in a town in Tennessee, will go to the store of a dealer in electric appliances in her home town. There she will see on display, not only the dealer's regular line of refrigerators, ranges, etc., but also a standard model, bearing the trademark of a recognized manufacturer, and also the mark of approval of the Tennessee Valley Authority. This refrigerator, or water heater, or range, will be priced very much lower than has heretofore been the case for even the least expensive of standard equip-

COMPLAINANTS' EXHIBIT No. 817 (Excluded)

ment of that kind. She will order one of the special refrigerators, let us say, and her husband will sign the proper papers. If his credit is acceptable, a delivery will be made immediately and the dealer will be paid in cash by the Electric Home & Farm Authority. Each month, over a period, there will appear on the Jones Electric bill an item in partial payment for the equipment which has been purchased. The plan will not be made available in any town in which the electric utility has not revised its rate to meet the requirements of Electric Home & Farm Authority. [fol. 3608]

Some years ago, when Franklin Roosevelt was a candidate for Governor of New York, he urged strenuously the importance of lower rates and power development which would make possible a wider use of electricity in the home. His opponents tried to poke fun at this program, by saying that Roosevelt wanted to put a waffle iron in every farm house. The women of Upstate New York saw nothing funny about the program at all, and voted accordingly. An attempt is now being made to ridicule the Tennessee Valley Authority's program of electrified homes, strongly reminiscent of that used in attempting to defeat Franklin Roosevelt's program in New York. We believe that the women of the Tennessee Valley will respond to the Authority's program, now sponsored by President Roosevelt, just as did the women of New York State in the case of Governor Roosevelt. Electric appliances are just as appropriate in the humble household as in the home of wealth. A love of home and a pride in that home is, by no means, a special possession of any group.

We have been talking thus far about increasing the use of electricity in homes in which electric service is already [fol. 3609] available. A further point in the Tennessee Valley Authority's program is to bring electric service to homes which heretofore have never had it at all. This is particularly the case with the farm home. The number of farms which have electric service in the Tennessee Valley and in the United States generally, is shockingly small. The Tennessee Valley Authority is definitely committed to an extensive program of rural electrification. The other day, on a country road in Northern Alabama, I watched a crew set poles for the first farm line ever constructed by the United States Government. This line will bring electric service to

COMPLAINANTS' EXHIBIT No. 817 (Excluded)

farmers in that area who have for years desired service, and who have adequate income to justify such service. Similar lines are being constructed in about 18 counties in Mississippi and Alabama, and others are planned in Tennessee.

The Tennessee Valley Authority from its offices at Muscle Shoals, Alabama, or Knoxville, Tennessee, will be glad to supply information, or answer inquiries not only from the Tennessee Valley area, but in any part of the country, concerning the Federal Government's plan, of bringing about a more comfortable and convenient home—through the use of the great national resource of electricity.

[fol. 3610] COMPLAINANTS' EXHIBIT No. 818 (Excluded)

TVA Press Release of January 26, 1934

TVA Electricity delivered over lines acquired from the Mississippi Power Company will light the homes and turn the wheels of industry in the city of Tupelo, Mississippi, beginning at one minute after midnight of February 7. When the switch is thrown turning electric energy from the Government owned plant at Muscle Shoals into the distribution lines of Tupelo, the program of the Tennessee Valley Authority of setting up a "yardstick" will be formally launched.

Tupelo is but one of a number of cities and towns in the ten counties of Northeast Mississippi which will likewise be supplied with TVA power at Government "yardstick" rates.

The Tennessee Valley Authority is also at work building hundreds of miles of rural transmission lines which will serve the rural population in a large part of these ten counties acquired in Mississippi. More than sixty miles of rural transmission line has been completed and as soon as arrangements can be made for the distribution of TVA [fol. 3611] power, these communities likewise will have the benefit of electric service which has heretofore not been available, and the low rates, which is a part of the TVA program.

COMPLAINANTS' EXHIBIT No. 818 (Excluded)

In the territory in Northwest Alabama which has been turned over to the Tennessee Valley Authority by the Alabama Power Company, engineers of the Authority are making extensive studies with a view of aiding the various municipalities in the area in effecting satisfactory negotiations, if possible, with the Alabama Power Company for the acquisition of municipal distribution systems. Every effort will be made by the Authority, according to a statement made today, to speed up the completion of necessary arrangements for furnishing TVA power to the communities in the area. As in Mississippi, the Tennessee Valley Authority is engaged in the construction of rural transmission lines in Lauderdale County. Plans are well under way for the extension of these rural lines into other counties in the Alabama area.

[fol. 3612] COMPLAINANTS' EXHIBIT No. 819 (Excluded)

TVA Press Release of March 3, 1934

Following an all-day conference between representatives of the City of Knoxville, Tenn.; C. E. Groesbeck, Chairman of the Board of the Electric Bond and Share Co., owners of the Knoxville Electric System, and David E. Lilienthal, representing the Tennessee Valley Authority, the following statement as to the results of the conference was issued tonight by representatives of the city:

"We made a definite offer to buy the existing electric distributing facilities within the City of Knoxville at a price fixed as fair by an exhaustive engineering survey. The price offered for the purchase of the Knoxville Electric System was not acceptable to the owners of that property. We have exhausted every possible means of purchasing this property at a fair price. The city of Knoxville, being unable to purchase the existing plant, now has no alternative but to proceed immediately with the construction of its own plant with funds loaned for that purpose by the Public Works Administration."

Mr. Lilienthal's statement follows:

[fol. 3613] "I indicated to the conference that I would recommend to the Board of Directors of the Tennessee

COMPLAINANTS' EXHIBIT No. 819 (Excluded)

Valley Authority that the Tennessee Valley Authority purchase transmission facilities and rural and semi-urban facilities owned by the company serving Knoxville lying within Knox County and the adjoining area, at a fair price to be determined under accepted engineering practice. This offer was made in an effort to make easier the problems of transfer, by purchase, of the properties within the City of Knoxville. This offer, when combined with the offer of the city, was not accepted."

The conference was attended by Mayor John T. O'Connor, City Manager W. W. Wynatt, Councilman W. A. Cochran, Chairman power committee; Charlton Evans, W. N. Smithson and W. H. Peters, Jr., Representing the Electric Bond and Share Co., and its subsidiary, the Tennessee Public Service Co., were C. E. Groesbeck, chairman of the board of directors, and MacGregor Smith, vice-president and manager of the New Orleans subsidiary of the Electric Bond and Share Co., and representing the Tennessee Valley Authority, David E. Lilienthal, member of the Board of Directors.

[fol. 3614] COMPLAINANTS' EXHIBIT No. 820 (Excluded)

TVA Press Release of March 13, 1934

Washington, March 13.—Low-cost electrical appliances to further Tennessee Valley electrification were brought a step nearer realization this morning with announcement by David E. Lilienthal, president of the EHFA and director of the Tennessee Valley Authority power program that some of the electric ranges and water heaters submitted by manufacturers give promise of being financed through the \$10,000,000 set aside by the Reconstruction Finance Corporation for the purpose. Though Mr. Lilienthal at the same time made it known that the prices of electric refrigerators offered for use in this connection, are still too high for the families of modest incomes, he indicated that the general plan as worked out in cooperation with the nation's leading manufacturers was about to be put into operation in the Valley.

COMPLAINANTS' EXHIBIT No. 820 (Excluded)

Last Friday, at the headquarters of the National Electrical Manufacturers' Association in New York, Mr. Lilienthal and his aides examined some 40 varieties of these labor-[fol. 3615] saving devices, built to conform to specifications drawn up by the respective manufacturing groups. As a result of this exhibition and inspection, Mr. Lilienthal today made public letters which he has dispatched to various exhibitors (copies of which are attached).

In his communication to each of the firms which exhibited refrigerators, Mr. Lilienthal said in part:

"It is our conclusion that this price, while lower than the existing price, is still too high to accomplish the wide distribution in the huge market of people of moderate and low income which the Electric Home and Farm Authority contemplates. * * * We are committed to the opinion that electric refrigeration should be obtainable even in the humblest home, and particularly in states having a warm climate. The electric rates fixed by the Tennessee Valley Authority, and those recently fixed by negotiation between the TVA and companies which are part of the Commonwealth and Southern System, have removed cost of operation as a serious deterrent to electric refrigeration in the section affected by these rate reductions. I am confident that the electric refrigeration industry, in turn, is sufficiently resourceful to do its part in making such service generally available. Our objectives may call for an entirely [fol. 3616] new approach in the design of electric refrigerators, in which costs are markedly reduced without loss of essential quality and durability."

To the makers of ranges which met his approval, Mr. Lilienthal remarked:

"It is gratifying to note that the price you have submitted is substantially lower than the prevailing price for equivalent quality. Our technical committee advises me that you have not sacrificed quality or performance. This price reduction is in line with our urgent recommendation to you that a huge mass market of users of electric ranges would respond to substantially reduced prices, and that with this increased volume there would be a decrease in unit cost, with consequent benefit to consumer and manu-

COMPLAINANTS' EXHIBIT No. 820 (Excluded)

facturer, and stimulation of business and employment in many fields. Although your company and others participating have taken this first step in the direction we have been urging, I am convinced that still greater reductions can be effected in the future if manufacturers have further time to study the matter of design and develop, through perhaps a new approach to the structure of electric ranges, designs which will be lower in cost and yet of unquestionable quality."

[fol. 3617] To water heater manufacturers Mr. Lilienthal held out the prospect of laboratory tests "under recognized auspices and with the continued cooperation of the United States Bureau of Standards and the Bureau of Home Economics of the Department of Agriculture.

[fol. 3618] COMPLAINANTS' EXHIBIT No. 821 (Excluded)

TVA Press Release of March 21, 1934

Contracts to serve cheap TVA electricity to nine cities with a population of approximately 200,000 have been signed by the Tennessee Valley Authority, David E. Lilienthal, TVA director in charge of power, announced today.

Heading the list is Knoxville, Tennessee, which already has been granted a loan by the Public Works Administration to construct distributing lines. The city's offer to purchase the existing facilities having been turned down, officials are now negotiating with an engineering firm to draw plans for a new system.

Other cities with which contracts have been signed are Decatur, Florence, Sheffield, Tusculmbia, and Russellville, in Alabama; Pulaski, Tennessee, and Amory, Mississippi. Tupelo, Mississippi, the first city to sign for TVA power, is now being served with low cost electricity from Muscle Shoals.

"As soon as these cities have acquired their distribution facilities the Electric Home and Farm Authority will begin an intensive campaign to make available low-cost high-grade electrical appliances — householders," Mr. Lilienthal said today. "The outlook at Tupelo already indicates that there

COMPLAINANTS' EXHIBIT No. 821 (Excluded)

will be a large expansion in the use of electricity under the low TVA rates. As a result, the contracts with the eight cities just signed provide for a large expansion in their electric consumption."

[fol. 3619] COMPLAINANTS' EXHIBIT No. 822 (Excluded)

TVA Press Release of March 25, 1934

Mosquito control similar to that used when Wilson Lake was formed at Muscle Shoals will be applied to both Norris Dam and Joe Wheeler Dam reservoirs immediately on completion of those two projects by the Authority, W. G. Stromquist, sanitary engineer for the Tennessee Valley Authority, said today. * * *

Three control methods that have proved successful at Wilson Lake will be used on Norris Lake and Wheeler Lake. The most effective of these, since these lakes will be primarily power reservoirs, will be the operation of the power generating plants at the dams. The draw-down of the water for the generating of power will come at the season when millions of the mosquitoes are in the larva stage and floating on the surface along the shores of the lake. The release of the water at the dam will lower the reservoir and strand the mosquito larvæ on the shore, where lack of moisture and the heat of the sun will eliminate them as a health menace. The draw-down of the water by the power plant corresponds to the drainage operations now being carried on by CWA workers in the state malaria control campaign.

[fol. 3620] COMPLAINANTS' EXHIBIT No. 823 (Excluded)

TVA Press Release of March 26, 1934

Washington, March 25.—Radical departure in the design of refrigerators is the answer of the General Electric Co. to call made some weeks ago by the Electric Home and Farm Authority through its president, David E. Lilienthal, for proposals from manufacturers on a line of high-quality electric appliances to sell at low price in the Tennessee Valley area.

COMPLAINANTS' EXHIBIT No. 823 (Excluded)

The new refrigerator submitted by General Electric is combined with an electric range, also new in design, forming a compact and attractive "electric kitchen" unit which can be quickly installed in any home.

"We have tried to meet your requirements by making an entirely new approach in design," says Mr. T. A. Quinn, vice president of the General Electric Co. in submitting the unit. "We are reducing costs in anticipation of greater volume, and at the same time improving the quality and durability of the product."

"This is what we have wanted," comments Mr. Lilienthal, "a fresh attack through the medium of advanced design upon the prices charged consumers for electrical appliances, to make these conveniences available to the home of modest income. The new General Electric refrigerator and range appear to be in line with our technical requirements."

Mr. Lilienthal states that he has also received definite assurances from a number of other manufacturers of totally [fol. 3621] new designs for refrigerators and ranges under way in their plants. He expresses "gratification of the progress made in the appliance program and announces acceptance, pending early submission of new designs, of revised price proposals made by the Kelvinator Sales Corp., Frigidaire Corp., and the Leonard Refrigerator Co. on standard refrigerators. The Kelvinator Sales Corp. expects to submit to EHFA an entirely new design in early April.

"We are confident that prices of refrigerators as approved for the Valley market will be between \$70 and \$80," declares Mr. Lilienthal. "This price is to be compared with present installed prices for the same equipment of around \$115. And with the increase in volume we may anticipate further reductions in the future."

Mr. Lilienthal, who is also director of the TVA power program, indicates that after negotiation with TVA, recently lowered rates for electricity in the Valley localities served by private utilities will make it possible for the \$10,000,000 customer-credit established for the EHFA to be extended through most of the Valley and also in some adjacent zones influenced by the TVA rural electrification program. He reports that utility companies in the south-east are inquiring as to what electric rate reductions they

COMPLAINANTS' EXHIBIT No. 823 (Excluded)

would have to make in order to bring the benefits of the EHFA program to their territories.

[fol. 3622] COMPLAINANTS' EXHIBIT No. 824 (Excluded)

TVA Press Release of March 28, 1934

Chattanooga has been selected as headquarters for the Electric Home and Farm Authority, David E. Lilienthal, its president and director of TVA, announced today.

"This location is predicated upon our ability to obtain suitable offices and display rooms in Chattanooga at a reasonable rental," Mr. Lilienthal said. "It will be necessary to have the display rooms and offices in the same building and centrally located."

"The electric division of TVA also will be centered in Chattanooga. The amount of personnel of both the EHFA and the electric division of the TVA will be limited at the start, but both will be expanded as the development of the program warrants."

Mr. Lilienthal said that Mr. F. J. Carr, Treasurer of EHFA and Mr. V. D. L. Robinson, administrative assistant to Mr. Lilienthal, would be in Chattanooga next Tuesday to look over proposed offices and display space.

Upon his return to Knoxville from Washington and the East Mr. Lilienthal expressed gratification over the speed with which manufacturers had prepared to market low-cost high-grade electrical appliances.

"The EHFA technical committee already has approved types of electric ranges, refrigerators, and water heaters," [fol. 3623] Mr. Lilienthal said. "Some of these models will be ready for market within a month."

Manufacturers are designing entirely new products which will no doubt revolutionize appliance design. An instance of this is a combined refrigerator and range which the General Electric Company has specifically designed for the EHFA. Kelvinator and Frigidaire engineers also are designing an entirely new type of refrigerator.

COMPLAINANTS' EXHIBIT No. 824 (Excluded)

Mr. Lilienthal also announced that the financial set-up of the EHFA has been completed and that the million dollar capital from the NRA has been made available. In addition to this, the EHFA has access to a credit of ten million dollars from RFC.

[fol. 3624] COMPLAINANTS' EXHIBIT No. 825 (Excluded) •

TVA Press Release of April 5, 1934

David E. Lilienthal, president, Electric Home and Farm Authority, appliance subsidiary of the Tennessee Valley Authority, today announced the following administrative appointments for Electric Home and Farm Authority:

George D. Munger, to be in charge of development of domestic electric consumption in the Tennessee Valley area.

William B. Phillips, assistant to the president.

Forrest Allen, director of press and publications.

Mr. Munger has been associated with the Central Hudson Gas and Electric Co. at Poughkeepsie for the past 10 years. During the past five years he has been in charge of developing and executing a general program of domestic electrification in the area served by the Central Hudson Co., an area extending from Albany to Peekskill, N. Y.

In 1931 Mr. Munger was recipient of the McGraw award for the best developmental plan in a specific industry. The program encouraged the wider use of electric appliances [fol. 3625] in the home.

Mr. Phillips has been associated with several advertising agencies. Before his connection with EHFA he was with the agency of Ewin, Wasey and Co., New York. He has also engaged in educational work and for a year was a faculty member of Dr. Alexander Meiklejohn's Experimental College at the University of Wisconsin.

Mr. Allen has been a member of the editorial staffs of Scripps-Howard newspapers in Tennessee and before joining EHFA was with the News-Sentinel at Knoxville.

Officers of EHFA announced previously are Francis J. Carr, comptroller of the Tennessee Valley Authority, who will be treasurer of EHFA, and W. A. Sutherland, solicitor of the Tennessee Valley Authority, who will be counsel for EHFA.

COMPLAINANTS' EXHIBIT No. 825 (Excluded)

The Electric Home and Farm Authority is a special agency created by executive order of the President to carry out an appliance program for TVA. Its central offices are to be established at Chattanooga.

[fol. 3626] COMPLAINANTS' EXHIBIT No. 826 (Excluded)

TVA Press Release of April 6, 1934

Dr. H. A. Morgan and David E. Lilienthal, directors of the Tennessee Valley Authority, were to leave Knoxville today for a conference with the Alcorn County Electric Association at Corinth, Miss.

Mr. Lilienthal made the following announcement in regard to the conference:

The Tennessee Valley Authority will submit a proposal to the Alcorn County Electric Association for sale of the electric distribution system in the county and in the city of Corinth. The Authority purchased the system from the Mississippi Power Company under the terms of the TVA contract with Commonwealth & Southern Corp.

It will be proposed that the electric cooperative enter into a power and purchase contract with the Authority, by which it is expected that the cooperative will have completed the purchase payments for the city and rural system within a period ranging from five to seven years.

The Alcorn County Electric Association is a non-profit corporation incorporated under the laws of Mississippi.

[fol. 3627] Under the plan proposed the rural resident's investment in the cooperative will be the same per customer as that of the city resident. The rural and city rates will be the same, an innovation in electric service.

Base rates for electric service will be the same as those now in force at Tupelo, Miss., first municipality to contract for the Authority's power. Added to those rates, however, will be a surcharge which will take care of the purchase of the system.

At the completion of purchase from TVA, the rates will be reduced the amount of the surcharge.

COMPLAINANTS' EXHIBIT No. 826 (Excluded)

With the surcharge added, the new Corinth and Alcorn County rates will be substantially less than those paid prior to the Authority's entry into this area.

"This type of organization may be the key to the rural electrification program," Mr. Lilienthal said.

"It will mean that the power business of Corinth and Alcorn County is being conducted by a private, non-profit corporation rather than by the city government of Corinth and the county Government of Alcorn County.

"It is an entirely new departure in the set-up of a combined rural and urban electric distribution system. One of the outstanding results will be an equality of rates between the farmer and his neighbor in town. This will be made possible by townsmen sharing a part of the cost of the rural system.

"The plan proposed also evolves a method of plant and system purchase without increasing the debt burden of the city and county. Payment for the system will be made from the purchase surcharge added to the rates."

The conference is set for Saturday afternoon.

[fol. 3629] COMPLAINANTS' EXHIBIT No. 827 (Excluded)

TVA Press Release of April 6, 1934

David E. Lilienthal, President, Electric Home and Farm Authority, appliance subsidiary of the Tennessee Valley Authority, today made the following announcement:

First sale and demonstration of electric appliances manufactured for the Electric Home and Farm Authority will be held at Tupelo, Miss., early in May. All appliances will carry a distinguishing mark of the Authority.

These appliances will be electric refrigerators, ranges and water heaters. They will be sold by Tupelo dealers on a term payment plan financed by EHFA, and are the products of a group of Manufacturers cooperating with the Authority.

Mr. Lilienthal and other officials of EHFA will attend the opening day sales and demonstrations at Tupelo, where civic organizations and municipal officials have planned a celebration for the day.

COMPLAINANTS' EXHIBIT No. 827 (Excluded)

Dealers will hold special demonstrations of the new equipment and EHFA will open a permanent exhibit and demonstration there. Daily instructional talks will be given in the use of the appliance.

Demonstration work will be organized under the direction of Miss Marie White of the TVA training division. She will have a trained assistant who will remain in Tupelo.

Guy Thaxton, division engineer for TVA in the Tupelo district, will become district manager for EHFA.

"The opening at Tupelo will mark the beginning of a concentrated effort to electrify the American Home," Mr. Lilienthal said. "Tupelo was selected for the launching of our appliance program because it was the first municipality to contract for TVA power."

"We hope and believe that the example being set by Tupelo will be followed throughout the country. It will be a demonstration of the widest possible use of electricity in the home.

"This abundant consumption of electric power is to be made possible by the combination of low electric rates and low-cost appliances, financed through EHFA.

"Application of our appliance program at Tupelo and in the surrounding area is a natural outgrowth of the spirit [fol. 3631] of active cooperation this community has demonstrated since the passage of the Tennessee Valley Authority Act a year ago."

The Electric Home and Farm Authority is a corporation established by direction of President Roosevelt to promote the use of low-cost electricity through low-cost appliances. Home offices of the corporation are being established at Chattanooga.

Mr. Lilienthal is one of the three directors of the TVA.

[fol. 3632] COMPLAINANTS' EXHIBIT No. 828 (Excluded)

TVA Press Release of April 7, 1934

David E. Lilienthal, President, Electric Home and Farm Authority, announced today that floor plans for EHFA offices at Chattanooga are now being prepared for the establishment of the appliance corporation's central headquarters at Chattanooga.

COMPLAINANTS' EXHIBIT No. 828 (Excluded)

Mr. Lilienthal said that the Authority expects to begin occupancy of its Chattanooga central office about May 1.

He said also that EHFA is contemplating the establishment of a completely electrified house in Chattanooga, as a part of the demonstration of electric appliance.

First sale and demonstration of the appliances approved by EHFA will be held at Tupelo, Miss., early in May. These appliances are electric ranges, refrigerators and water heaters.

Mr. Lilienthal said that the Authority was not ready to announce the building selected by it for its Chattanooga offices.

"Our offices in Chattanooga will be started on a limited scale," Mr. Lilienthal said.

[fol. 3633] "We expect to begin our occupancy of EHFA headquarters there about May 10. The extent of EHFA personnel in Chattanooga cannot be determined at present. It will depend upon the progress of our organization and the speed with which the program expands.

"In addition to a complete display of EHFA appliances at our headquarters, definite consideration is being given to the establishment of a house in Chattanooga which will be made into a fully electrified home.

"Such a house would be a center of attraction for all who are interested in applying the energy of electricity to the tasks of the home.

"It seems to me that some city in the United States is going to be called the electric city. We hope to see this title go to Chattanooga. It should become the actual realization of the Tennessee Valley Authority's power program."

Appliances approved by EHFA will be offered for sale by dealers in May in the cities using TVA power and throughout the area served by the operating companies of Commonwealth and Southern Corp.

This area includes the territories served by Tennessee Electric Power Co., Mississippi Power Co., Georgia Power Co., and Alabama Power Co. Large cities served in this area are Nashville, Chattanooga and Atlanta.

[fol. 3634] COMPLAINANTS' EXHIBIT No. 829 (Excluded)

TVA Press Release of April 9, 1934

William B. Phillips, assistant to the president of Electric Home and Farm Authority, will meet Wednesday in New York with advertising managers of electric appliance manufacturers who are cooperating with EHFA.

Purpose of the conference will be to coordinate advertising programs of manufacturers with the promotion work of EHFA. Representatives of all manufacturers whose products have met EHFA quality and price specifications will be present.

Companies which are manufacturing one or more appliances approved by EHFA are:

Estate Stove Company, Hamilton, Ohio.

A-B Stove Company, Battle Creek, Michigan.

Landers, Frary & Clark, New Britain, Connecticut.

A. J. Lindemann & Hoverson Co., Milwaukee, Wis.

Edison General Electric Appliance Co., New York City, N. Y.

Westinghouse Electric & Mfg. Co., New York City, N. Y.

Cleveland Heater Company, Cleveland, Ohio.

Hynes & Cox Electric Corp., Albany, N. Y.

McGraw Electric Company, Chicago, Illinois.

Malleable Iron Range Co., Beaver Dam, Wisconsin.

Kelvinator Corp., Detroit, Michigan.

Approved appliances will carry a distinguishing mark of the Authority and will be sold through regular dealer outlets. They will be financed on term payments by EHFA [fol. 3635] with the cooperation of local electric service utilities.

Sale of approved appliances is restricted to areas served by the Tennessee Valley Authority or by electric utilities under an appliance agreement with TVA which includes domestic rates low enough to make use of appliances feasible for low or moderate income groups.

First EHFA equipment will be electric refrigerators, ranges and water heaters.

[fol. 3636] COMPLAINANTS' EXHIBIT No. 830 (Excluded)

TVA, Press Release of April 10, 1934

George D. Munger, in charge of the domestic appliance program of Electric Home and Farm Authority, today announced that EHFA approved electric ranges and refrigerators would all retail at not more than \$80.00, and all approved electric water heaters would retail at not more than \$65.00.

Mr. Munger also announced the list of manufacturers and the appliances they make which have been approved by EHFA as to quality and price.

These manufacturers are:

Electric Ranges:

A-B Stove Company, Battle Creek, Mich.
Edison General Electric Appliance Co., New York City, N. Y.
A. J. Lindemann & Hoverson Co., Milwaukee, Wis.
Malleable Iron Range Co., Beaver Dam, Wis.
Landers, Frary & Clark, New Britain, Conn.
Westinghouse Elec. & Mfg. Co., New York, N. Y.
Estate Stove Company, Hamilton, Ohio.

Electric Refrigerators:

Kelvinator Corp., Detroit, Mich.

Electric Water Heaters.

Malleable Iron Range Co., Beaver Dam, Wis.
Westinghouse Elec. & Mfg. Co., New York City, N. Y.
Cleveland Heater Co., Cleveland, Ohio.
[fol. 3637] A. J. Lindemann & Hoverson Co., Milwaukee, Wis.

Hynes & Cox Electric Corp., Albany, N. Y.

McGraw Electric Co., Chicago, Ill.

Edison G. E. Appliance Co., New York City, N. Y.

Mr. Munger said that while only one refrigerator has been approved, negotiations for the approval of other makes are now under way.

At the outset of the appliance program, Mr. Munger said, the EHFA-approved line will have only one type in each item.

The electric ranges will all be of a three-burner, temperature controlled oven type.

COMPLAINANTS' EXHIBIT No. 830 (Excluded)

The refrigerators will all be of four cubic feet capacity or its equivalent.

In the water heaters there will be some variation as to capacity, depending upon the make of the heater.

"The refrigerators and ranges carrying the approval of EHFA," Mr. Munger said, "will all retail for not more than \$80.00 and the water heaters will sell for not more than \$65.00.

"A distinguishing mark of the Tennessee Valley Authority will be carried on each appliance, so that the purchaser will recognize products accepted for the low-cost appliance program."

The appliance program will be opened early in May at Tupelo, Miss., the first municipality to contract for TVA power. At about the same time these appliances will be [fol. 3638] offered for sale throughout the area served by operating electric utilities of the Commonwealth and Southern system.

This area includes rural and city areas served by the Tennessee Electric Power Co., the Mississippi Power Co., the Alabama Power Co., and the Georgia Power Co. Included in the region are the cities of Nashville, Chattanooga and Atlanta.

Sale of EHFA approved appliances in these areas will be made possible through an agreement now being negotiated between Commonwealth and Southern and the Tennessee Valley Authority. This agreement will include the stipulation that domestic electric rates must be low enough to make use of appliances feasible for low or moderate income groups.

"Approval by EHFA of an appliance," Mr. Munger explained, "and the presence of the TVA mark of approval on the product means that the quality of the appliance is acceptable, the price reasonable, and the domestic electric rates where it is to be used are low enough to conform to the power policy of TVA."

The Electric Home and Farm Authority is a subsidiary corporation of TVA to promote use of electric appliances and finance their purchase on term payments.

[fol. 3639] COMPLAINANTS' EXHIBIT No. 831 (Excluded)

TVA Press Release—Undated

A new plan of power distribution, embracing an entire county whereby city residents and farmers will be supplied with electricity at the same rate, has been set up in Alcorn County, Mississippi, which includes Corinth, a city of more than 6,000 population is reported by the Tennessee Valley Authority through its adjunct, the Electric Home and Farm Authority.

Distribution will be managed by the Alcorn County Electric Association, a non-profit organization, incorporated under the laws of Mississippi. City and county governments will not be involved in either the purchase or management of the system.

The distribution lines in Corinth with two rural extensions were purchased by the Tennessee Valley Authority under terms of its contract with the Commonwealth and Southern Corporation. The TVA is completing the rural system. The County Association will enter into a power and purchase contract with TVA and take over the complete system. Base rates for current will be the same as those now in force at Tupelo, Mississippi, the first municipality to contract for TVA power. Added to these rates will be a surcharge which will amortize the cost of the system within [fol. 3640] a few years. When the Association has completed the purchase from the Authority, the surcharge will be removed. With the surcharge added, the new rates will be substantially lower than those paid prior to the Authority's entry into this area.

"This plan may be the key to the rural electrification program," reports Chairman Arthur E. Morgan of the TVA, who points out: "It will not increase the bonded indebtedness of county or city, and will not place additional duties upon public officials."

[fol. 3641] COMPLAINANTS' EXHIBIT No. 832 (Excluded)

TVA Press Release of April 16, 1934

Electric Home and Farm Authority, Inc.

General Information (Supplement)

Emblem: A TVA emblem has been designed for certain electric appliances for purposes of identification. The presence of this emblem on an appliance means that the appliance has been built to EHFA specifications as to quality and design, and that the retail price fixed by the manufacturer is one which EHFA considers reasonably low.

Appliances to be financed.—In the beginning the EHFA-approved line of appliances will be confined to electric ranges, refrigerators and water heaters. There will also be portable motors and a pump motor. It is possible that in the course of a few months other items will be added to the list. The manufacturers whose appliances have been approved by EHFA to date as to quality, design and price are Electric Ranges:

A-B Stove Co. (A-B), Battle Creek, Michigan.

Edison General Electric Appliance Co. (Hotpoint), New York, N. Y.

[fol. 3642] A. J. Lindemann & Hoverson Co. (L&H), Milwaukee, Wisconsin.

Malleable Iron Range Co. (Monarch), Beaver Dam, Wisconsin.

Landers, Frary & Clark (Universal), New Britain, Connecticut.

Westinghouse Elec. & Mfg. Co. (Westinghouse), New York, N. Y.

Estate Stove Co. (Estate), Hamilton, Ohio.

Electric Refrigerators:

Kelvinator Corporation (Kelvinator), Detroit, Mich.

Leonard Refrigerator Co. (Len-a-dor), Detroit, Mich.

Norge Corporation (Norge), Detroit, Michigan.

Electric Water Heaters:

Malleable Iron Range Co. (Monarch), Beaver Dam, Wis.

Westinghouse Elec. & Mfg. Co. (Westinghouse), New York, N. Y.

Cleveland Heater Co. (Rex), Cleveland, Ohio.

COMPLAINANTS' EXHIBIT No. 832 (Excluded)

A. J. Lindeman & Hoverson Co. (L&H), Milwaukee, Wisconsin.

Hynes & Cox Electric Corp. (Red Crown), Albany, N. Y.

McGraw Electric Co. (Clark), Chicago, Illinois.

Edison General Elec. Co., (Hotpoint), New York, N. Y.

Philadelphia Elec & Mfg. Co. (Pemco), Philadelphia, Pa.

Prices, Description and Delivery Dates: Prices, description [fol. 3643] tive matter, and probable date delivery can be made can be secured through the local dealers representing the manufacturers named above. It is expected that full information will be in the hands of dealers in EHFA territory around the 1st of May.

Consumer outlets.—Arrangements will be completed as rapidly as possible for the sale and delivery of EHFA approved appliances through existing dealer outlets. Similar outlets will be established from time to time if it is found necessary to do so in order to render proper and convenient service to the citizens of the area.

Territory.—EHFA-approved appliances will be placed on sale by dealers about May 1st in all communities now directly served by TVA power. In addition, these appliances will also be on sale throughout the entire area served by the Commonwealth & Southern Corporation's operating companies under special agreement with EHFA. These are the Tennessee Electric Power Company, the Alabama Power Company, the Georgia Power Company, and the Mississippi Power Co.

TVA emblem-bearing appliances cannot be sold or financed under the EHFA plan in a community until the local electric [fol. 3644] utility in such community has entered into a special agreement with EHFA. Items included in this agreement will have reference to domestic rates for electricity, disposition of installation charges, collection methods, etc.

Central Office.—Central offices of EHFA are to be established at Chattanooga about May 15. Until permanent offices have been established, inquiries should be addressed to Electric Home and Farm Authority, Knoxville, Tennessee. Inquiries to manufacturers can be addressed directly to them at addresses given above.

[fol. 3645] COMPLAINANTS' EXHIBIT No. 833 (Excluded)

TVA Press Release of April 17, 1934

David E. Lilienthal, president, Electric Home and Farm Authority, appliances subsidiary of the Tennessee Valley Authority, today announced the selection of a special TVA emblem to be placed on all appliances sold under the EHFA program.

The emblem was designed by Young and Rubicam, a New York advertising agency, and was selected from a large number of emblems submitted by various advertising agencies.

It consists of a blue hand holding a lightning bolt in red, with TVA in large red block letters below the hand. Beneath the TVA, there is the slogan: "Electricity for all."

This emblem, Mr. Lilienthal said, would be first used on the electric ranges, refrigerators and water heaters being manufactured for the EHFA program.

Sales of these products will begin early in May in Tupelo, Miss., first municipality to contract for TVA power. About the same time sales will begin also in areas served by the operating companies of the Commonwealth and Southern Corporation, which has an appliance agreement with the Authority.

"We shall retain rigid control of the use of this emblem [fol. 3646] on appliances," Mr. Lilienthal said. "It can be used only on appliances manufactured to EHFA quality and price specifications, and only on those appliances when they are sold in areas served at TVA rates or at rates which the Authority considers low enough to make use of this equipment feasible to families of low or moderate income."

The emblem will be used throughout the power department of the Tennessee Valley Authority, Mr. Lilienthal said. Eventually it will be placed as an identifying mark on all equipment of this branch of the Authority.

[fol. 3647] COMPLAINANTS' EXHIBIT No. 834 (Excluded)

TVA Press Release of April 22, 1934

Address of David E. Lilienthal Before the Tennessee Valley
Institute of the University of Chattanooga, Chattanooga,
Tennessee, 8:00 P. M., April 21, 1934

The Future of Industry in the Tennessee Valley Region

It is my firm conviction that the Tennessee Valley region is to be the scene of an expansion of industry which in the course of the coming decade will change the economic life [fol. 3648] of the South. If this industrial development is controlled in the interest of the entire community and fitted into a national program, it will stimulate and regenerate the industrial life of all America. We in the Tennessee Valley area, in a very real sense, face a new frontier—an industrial frontier. There lies before us an opportunity for industrial leadership, calling for the courage, the energy and the self-discipline of the pioneers on the Western frontier of a century ago.

It is my purpose this evening to lay before you and my other neighbors in the Tennessee Valley, facts and reasons which have led me to the conclusion that we are about to witness in this area a period of industrial expansion unprecedented in its magnitude and opportunities.

I should like first of all to enumerate those factors in the economic situation of this great region upon the foundation of which a period of industrial development will arise. I shall then discuss each of these factors more in detail.

First. We can have in this region low-cost electric power in almost unlimited quantities.

Second. This is an area of natural resources almost unequalled in their variety and richness, not the least of which [fol. 3649] is a climate most favorable to health and well-being and the successful pursuit of agriculture.

Third. Is the great potentiality of this area as to economical transportation—water, rail and highway.

Fourth, and perhaps most important of all: In creating the Tennessee Valley Authority the President and Congress have made it possible for this area to develop its natural resources, its power and its transportation in accordance

COMPLAINANTS' EXHIBIT No. 834 (Excluded)

with an intergrated and orderly plan. Under such a plan the short-sightedness and greed of individuals and single communities can be controlled, and the interests of the people as a whole kept paramount. Such an integrating and unifying force in the development of industrial resources is unique in our nation's history.

I turn first to the reason which I have suggested as insuring a period of great industrial expansion for the South—the availability of cheap electric power.

The TVA has under way, as you know, a comprehensive program for the development of the power resource of the Tennessee River and its tributaries. No more ambitious program of hydro-electric development has ever been actually undertaken in this country. Aided by an exhaustive [fol. 3650] survey prepared by the corps of Engineers of the United States Army under the direction of Colonel Harold C. Fiske, the Authority is constructing what probably will be the most efficient system for the utilization of the water resources of a vast area.

As you know, we have started with the nucleus of Wilson Dam at Muscle Shoals. Within two years two more great dams will be completed—one, the Norris Dam on the headwaters of the Clinch River near Knoxville; the other, the Joe Wheeler Dam just above the Wilson Dam in Northern Alabama. Four other major dams of various types will probably be approved for early construction. A large staff is now planning the dam-building program for the next decade.

Everything considered, the electricity produced in this vast public hydro-electric system will be as cheap as power can be produced in any part of the United States, and much cheaper than in many sections. One reason for this is the efficiency which arises from integrated control of an entire watershed under single public ownership and administration. That ownership and control is one which is dominated by one purpose and one purpose only—service to the whole people to whom these streams belong. By the use of storage reservoirs and central control, all the vast economies [fol. 3651] of large-scale production will be utilized, and the Tennessee River and its tributaries will be made to yield their great potential wealth into the hands of the people of the Tennessee Valley. The presence of coal in great quan-

COMPLAINANTS' EXHIBIT No. 834 (Excluded)

tities for standby and auxiliary steam plants will tend to keep the cost of electricity below that possible in areas having favorable hydro-electric power but in which coal is costly.

Perhaps the most important factor in insuring a low cost for hydro-electric power in this region is the fact that the distribution of this power to the factories and homes and farms, for the most part, will be in the hands of public agencies. Industries seeking to use large blocks of hydro-electric power in the Tennessee Valley will not be forced to support dizzy towers of inflated capitalization. They will not have to pay for the financial misdeeds of the builders of utility pyramids. Under public distribution of power with centralized accounting, control and supervision in the hands of a regional authority, there will be the greatest incentive to economy and managerial efficiency. Each community will try to make its record better than that of its neighboring community.

Furthermore, since the operations are public operations, they will be subject to that constant stream of public [fol. 3652] criticism which, while at times unpleasant to those who are thin-skinned, will insure the most careful scrutiny of operations. This perennial scrutiny of the work of public servants will certainly do more to protect the consumer against inefficiency and excessive rates than the sympathetic wrist-tapping which goes under the name of public utility regulation in so many states.

It is unnecessary to demonstrate to this audience the importance of low industrial power rates in the development of an industrial program. Since the first month of operations in Tupelo under the TVA schedule of rates put into effect in that Mississippi municipality, we have made comparisons of bills paid by certain industries. These comparisons show in a striking way the results of low-cost power in bringing down operating expenses. I have here a statement of the Reed Brothers Incorporated, power bill for January, 1934, and March 1934. The January billing was under the old rate; the March billing was under the new TVA rate. This statement shows that Reed Brothers in January paid \$210.25, while in March under the new schedule they paid \$145.38. This meant a reduction of \$64.87 in the power bill, or reduction of 30.8%, the amount of power consumed in-

COMPLAINANTS' EXHIBIT No. 834 (Excluded)

creased 55.2%. I have here the billings of the McLeran Ice [fol. 3653] Cream Company for January and March, 1934 power. Under the old rate, this company's billing was \$92.19, while under the new rate the billing was \$56.23, or a reduction of \$35.96, which amounted to 39%. In March the power consumption was 26.9% greater than the January consumption, yet the cash paid for the power was 39% less.

Perhaps the major industry in Tupelo is cotton milling. I have here a statement of the Tupelo Cotton Mill's bills for January and for March this year. In January, under the old rate, the Tupelo Cotton Mill paid \$3,181.33, while for the month of March, under the new TVA rate, the billing was \$1,896.40, or a decrease of \$1,284.93. While the bill for March power used by this mill was 40.4% less, the mill, in the same period consumed 26% more power.

The significance of such figures in textile manufacturing is clear. According to the Textile World, the power costs in Southern textile mills operating under code requirements range from about 10% to 15% of all manufacturing costs, including plant overhead, but excluding cost of raw materials, depreciation charges and federal taxes. With this in mind it is easily seen what an important cost factor power rates can be in the South.

[fol. 3654] It is true that in some other industries the cost of power represents a smaller portion of the total cost of operation, but there are many industries, including those especially adapted to the resources of the Valley, such as electrochemical and light metal industries, in which power is a dominant cost factor. It is inevitable that industry will turn to this region as the Tennessee River yields to this program for the development of low-cost power.

Nor is this all. I am advised that there are many lines of industry which cannot now profitably operate because of high power rates; these will find that they can operate and successfully function in this area. To my desk at Knoxville there has come in recent months an impressive number of inquiries from industrialists in various fields, requesting specific information concerning TVA power rates, and asking advice respecting locations for industrial enterprises requiring large quantities of power. As our program pro-

COMPLAINANTS' EXHIBIT No. 834 (Excluded)

gresses and the country hears not only of what you and I here in this region plan to do but what we are actually doing, these inquiries will increase and will be translated into actual operations and actual payrolls. . . .

The ways in which the TVA can function in carrying [fol. 3655] forward this program of industrial expansion are many. In some capacities it will act as a proprietor, such as in the case of its electric operations. In others, it will furnish the disinterested technical advice of engineers, accountants and business men. In still other capacities, it will seek to smooth out those jealousies and rivalries between cities which lead to destructive animosities and prevent healthy industrial development. In stimulating and aiding the readjustment of agriculture the Authority will be exercising a function which will make for a sounder industrial future. Through the nation-wide publicity given the Authority's operations, the advantages of the region will receive the widest attention of business men the country over.

I am very definitely of the opinion that it is the Authority's duty to encourage and stimulate the growth of large-scale industry in the Tennessee Valley area. We are making provision for one of the largest hydro-electric developments in the world, with a potential three million horse power available. We are expending, and expect to expend, millions upon millions of dollars in construction activities, all looking toward the development of more and more power. Although we are bending every effort to greatly increase [fol. 3656] the use of electricity in the home and on the farm, it is obvious that only a large-scale industrial expansion will absorb the great pool of power which is thus being created. As we lay our plans for developing this cheap power in great quantities, it seems to me to be mandatory that we also lay plans for utilizing it in a industrial expansion program.

There is nothing inconsistent in urging the development of large-scale industry and at the same time promoting, as we are, a program of small-scale industry in connection with agriculture. There is no conflict in these two aspects of a single program. The two develop side by side. This is not the appropriate occasion to discuss in detail the particular kinds of industries and the special types of operation

COMPLAINANTS' EXHIBIT No. 834 (Excluded)

which I believe should characterize this industrial expansion nor to indicate the hopeful prospects already near at hand, for decentralization of great industrial operations. The point I should like to make now is to repeat my conviction that it is the Authority's duty as well as its privilege to encourage the growth of large-scale industry.

This program should be based squarely upon the obvious economic benefits which industry will enjoy in the area. It should be based upon the factors of cheap hydro-electric [fol. 3657] power and an abundance of mineral and other natural resources. It will be a sad day for Southern industry if the presence of a new factory here means merely the creation of an industrial graveyard in New England, or some other section. What I see for this area is an economically sound growth of commerce and manufacturing, which will fit itself into a national economy. It seems to me that it would be no less than fatal and destructive to the entire program if industry were to come to the Valley on any other basis than the natural advantages of the region. The South has ample inducement to offer on strictly business merits of the advantages found here. I believe that we all recognize that the South today needs no false lures to win the industrial development which should naturally be here.

I view the whole question of proper exploitation of the mineral resources of the Tennessee Valley as pertinent to this new industrial program. Two phases of this matter deserve attention.

First, in the development of mineral resources during the past decade science has been giving increasingly greater attention to the chemical development of minerals as opposed to purely mechanical processes. As a result of this we may, [fol. 3658] therefore, expect our own developments to lead us into the creation of new products and into the use of new raw materials.

Second, through the ability of the Tennessee Valley Authority to supply low-cost electric energy and the presence of low-cost energy from other sources, we are not merely supplying a cheaper source of mechanical power, but we are making possible the development of electro-chemical and electro-metallurgical industries which heretofore have been impossible of profitable operation owing to the high cost of electric energy employed in the process.

COMPLAINANTS' EXHIBIT No. 834 (Excluded)

Those two considerations open up entirely new fields for the consideration of industrialists and chemists in the future development of the mineral resources of the Valley.

[fol. 3659] COMPLAINANTS' EXHIBIT No. 835 (Excluded)

TVA Press Release of April 22, 1934

The Electric Home and Farm Authority, appliance subsidiary of the Tennessee Valley Authority, will occupy the ground floor of the James Building, Eighth and Broadway, Chattanooga, Tenn., David E. Lilienthal, president of the corporation, announced Saturday. Central offices of EHFA will be situated at Chattanooga.

Temporarily, Mr. Lilienthal said, EHFA administrative offices will be in the new Federal Building at Chattanooga. The ground floor of the James Building will be occupied entirely by a permanent display of electric appliances, Mr. Lilienthal explained.

Later on, it is expected that the administrative offices will be moved to the James Building from the Federal Building. The display room in the James Building is expected to be ready in about 30 days.

EHFA will also occupy the first floor of the old post-office building at Chattanooga, in which it will maintain its mailing department and a photographic department.

The display of appliances in the James Building will [fol. 3660] be one of the most comprehensive in the country. All types of equipment will be represented, including the special lines of low-cost refrigerators, ranges, water heaters, portable motors and pump motors, which are to carry the distinguishing mark of the Authority.

Design of the display floor is being carried out under the direction of R. A. Wank, chief architect of the Tennessee Valley Authority.

[fol. 3661] COMPLAINANTS' EXHIBIT No. 836 (Excluded)

TVA Press Release of April 23, 1934

David E. Lilienthal, director of the Tennessee Valley Authority, today announced that the Authority had entered

COMPLAINANTS' EXHIBIT No. 836 (Excluded)

into a contract with Young and Rubicam, Inc., a leading advertising agency of New York.

It is believed that this is the first time a department of the federal government has retained an advertising and merchandising agency for consulting services.

Mr. Lilienthal said that the agency will assist TVA in planning a campaign to promote the greater use of electricity in the home and on the farm. The contract is for a period of four months.

Young and Rubicam, Inc., is the agency which designed the emblem which Electric Home and Farm Authority will use in its program to promote the use of electrical appliances. The agency will cooperate with EHFA generally.

"The Authority has retained the consulting and technical services of Young and Rubicam to aid the power development of its own territory and to assist in our appliance program carried on under EHFA.

"Consultant and technical services of Young and Rubicam will be used by TVA in perfecting its plan for the marketing of power and to assist the Authority in effecting the [fol. 3662] most efficient ways for increasing the consumption of power by the Authority's customers.

"The agency will aid the Authority in formulating a general long-time plan for the program of increasing the use of appliances."

Mr. Lilienthal said that at the end of the four months period, Young and Rubicam is to submit to the Authority a plan for its promotional work, which will include a coordination of efforts of manufacturers, dealers and utilities. The contract provides for a broad cooperation between the Tennessee Valley Authority, EHFA and Young and Rubicam.

Negotiations for the contract were carried on by Mr. Lilienthal, George D. Munger and William B. Phillips for EHFA and by S. S. Larmon, C. L. Whittier and Donald Payne, for the agency.

Executives of Young and Rubicam, accompanied by stage artists and merchandising specialists for the agency, have been in Knoxville for several days working on plans with TVA and EHFA officials.

[fol. 3663] COMPLAINANTS' EXHIBIT No. 837 (Excluded)

TVA Press Release of April 25, 1934

Electric Home Specialists.

That's the new name for the Electric Home and Farm Authority's corps of appliance demonstrators.

Guy Thaxton, the Authority's district manager in Northern Mississippi, contributed the idea at a school for the workers in Knoxville.

The Electric home specialists will not be salesmen. Rather, they will serve as instructors in the use of approved electrical appliances, and as counsellors in the application of electricity to the home and farm.

They will work first at Tupelo, where the first showing of appliances carrying the TVA emblem will begin early in May.

[fol. 3664] COMPLAINANTS' EXHIBIT No. 838 (Excluded)

TVA Press Release of April 25, 1934

Electricity's promise to the housewife is to be portrayed in an "electrical home" by the Electric Home and Farm Authority.

The home will be built at Wilson Dam, Ala., President David E. Lilienthal announced yesterday.

The Electric Home and Farm Authority and its parent, the Tennessee Valley Authority, will cooperate in building it.

It will be a typical three bedroom home—heated electrically. The same system will condition its air in winter, cool it in summer.

The kitchen will be electrical. A range, refrigerator, water heater—all bearing the upright arm and power symbol of TVA approval—will be on view there. An electrical dishwasher will be there, too, with lesser kitchen appliances.

In the basement there will be a powered laundry—washing, ironing to be done electrically.

Thousands of tourists will see the permanent display. The house will be designed as a national center for visual demonstration of the electrical idea.

Parts of the basement and attic will be set aside for display of equipment not installed in the home. An auditorium annex will be built for movies, lectures and a resting place for visitors.

[fol. 3665] COMPLAINANTS' EXHIBIT No. 839 (Excluded)

TVA Press Release of April 25, 1934

Address of David E. Lilienthal, Director and General Counsel of the Tennessee Valley Authority, Before the League of Women Voters, Boston, Massachusetts, Evening of April 24, 1934

It is a matter of particular gratification to me to have the opportunity to speak to this great League on the subject of electricity, for you have a two-fold interest in this whole question. As a group of women united to take part in the political life of the city, state, and nation, you have an immediate and direct interest in the community control of public utilities. As women of America, individually, you are the most important of all users of electricity—the users of electricity in the home.

This League for years has been distinguished by its alert and effective interest in public utilities and their regulation. Your organization has been singled out by more than one writer as being unique among associations of women—because you have demonstrated an independence of thought [fol. 3666] and action. Dr. Ernest Gruening, in his book, *The Public Pays*, makes special mention of this League as being one of the few women's organizations which remained free of utility influence during the great propaganda campaign of the '20's.

Not only has this League demonstrated an active interest in the field of public utilities generally, but you also have played an important part in the development with which I am now associated—I speak of Muscle Shoals and the Tennessee Valley program. There can be no question but that without the support of organizations of your prestige, Senator George Norris might have fallen short of victory in his decade-long fight to retain the great hydro-electric properties at Muscle Shoals for the use of all the people.

It is, therefore, particularly fitting that a year after the passage of the Tennessee Valley Authority Act, we should be making a report to you of the progress of that program which the League of Women Voters so ably championed.

The power program of the Authority is an important part of its present plans and also of its long-range regional program. The starting point in any discussion of this power

COMPLAINANTS' EXHIBIT No. 839 (Excluded)

policy and program must be this: that the distribution of electricity is not like the ordinary private business. By its very nature, the generation and distribution of power, [fol. 3667] whether by private or public agencies, is a public business, for in our present-day community life we are all utterly dependent upon that service.

The Authority is charged with the duty of carrying out a national power policy, and the safeguarding of the public interest in the country's greatest resource. This program profoundly affects the future development of our country's commerce, its industry, and the well-being of all its people. It is not a policy that has been formulated over night. It has been sponsored by the President; it has been thoroughly debated in the Congress. The power program of the Authority is an integral part of a larger policy for the economic development of the United States.

In order to comprehend fully the reasons for the power program set out in the Tennessee Valley Authority Act, it is necessary to recall what has been happening in the United States during the past ten years. It is necessary to understand that the people back home have become thoroughly aroused; that they are determined that the disgraceful looting of the public business of power shall not be repeated. You are all familiar with the sordid story. I need not recall to your minds the quarter of a million dollars which that late resident of Greece, Mr. Samuel Insull, paid to the [fol. 3668] chairman of the State Commission which was supposed to be regulating his Illinois utilities. It was probably no surprise to you when you learned that a Pennsylvania public utility paid the hospital bills of the Chairman of the Pennsylvania Public Service Commission. Those of you who observed the political methods of many utilities during the past ten years were shocked but not surprised at the recent disclosures concerning Chairman Thayer of the Public Service Committee of the New York Senate.

The deepest resentment over the mis-management of the power business has been among the ranks of the small investor. Much of the capital by which the great financial giants have carried on their operations has come from the savings of men and women of modest means. The widow with her small insurance fund, for example, was assured by the stock salesman that public regulation would protect

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her against wilicat financial operations, that the public utility industry was in the hands of men who regarded themselves, in effect, as trustees of a great public business. And when the small investors learned the real facts, their resentment has been greater even than that of the consumer.

Not have the people back home forgotten the story which was revealed by the Federal Trade Commission in its investigation of the propaganda activities of the electric industry. [fol. 3669] There has never been a bolder attempt to buy the public opinion of the people of the United States. That widespread scheme of capturing the sources of public information would have destroyed the American system of democracy.

But the most serious indictment of the public utility industry is that it has not devoted itself effectively to its primary function of making electricity available at low cost to the American home. The best evidence of this situation is the simple fact that after fifty years the average use of electricity in the homes of this country is not more than 50 kilowatt hours a month. This question concerns your League, not only as an organization for civic activity, but as a group of individual women responsible for the home.

Now this is what had been going on throughout the United States—financial excesses, political corruption, an enforced frugality in the use of a great natural resource. In many states it had become perfectly obvious that the regulators were not regulating the utilities, but that in effect the utilities were regulating the regulators. In other states the regulatory commissions were doing an honest and sincere job, but were rendered ineffective by the interminable procedure of regulation. And so to supplement and reinforce regulation, [fol. 3670] Congress passed the Tennessee Valley Authority Act. This act is not an assault upon private ownership and management of public utilities; but it is a determined attack on private mis-management of the public business of power at the expense of the people back home—housewives and investors alike.

The first duty of the Tennessee Valley Authority in its power program is to set up what the President has called "yardstick" by which to measure the fairness of electric rates. It has an additional function. It is a reminder that unless that business is carried on by private corporations

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with a due sense of responsibility to the paramount public interest, that the public, at any time may assume the function of providing itself with the necessity of community life.

What the Tennessee Valley Authority is required to do in its power program is to set up an area for power operations. This part of its undertaking I can best describe by taking a specific case. The Authority has entered into a contract with the City of Tupelo, in Northeastern Mississippi, the first agreement for the sale of power from Muscle Shoals to any municipality. I would like to outline to you some of the terms of that contract, which are standard with all communities served by the Authority.

[fol. 3671] Under the contract the Authority agrees to supply power at wholesale, which the City of Tupelo then distributes through its publicly-owned electric distribution system. The cost of the power to the City of Tupelo represents a saving to the municipality of 60% of the cost of equivalent power under its previous service by a private power company.

Almost as important as the price of current which the City will pay, are the relationships set out in the contract. The City agrees to administer the electric utility as a separate unit, and not to merge the utility's funds or accounts with those of the municipality. This is a safe-guard against political interference in the administration of the utility plant. The City further agrees to keep its accounts according to a uniform system, so as to reveal all operations of the plant. This is a safe-guard against unsound practices and an incentive to improve methods. These accounts will be regularly audited by agents of the Valley Authority.

The municipality agrees to apply sound business principles to the use of its electric revenues. Revenues will be first applied to operating expenses, including taxes, and then to payment of interest on bonds applicable to the electric system, and toward the retirement of those bonds. A [fol. 3672] reasonable reserve is to be set up for new construction and contingencies. Taxes are to be paid by the municipal utility at rates equivalent to the taxes which would be levied against a privately-owned utility. Then the taxpayers' general fund will receive a return on the municipality's equity of 6% a year. After these items have been

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provided for out of the revenues, the City agrees to apply the surplus to further reductions in rates to consumers, on a nondiscriminatory basis.

It will be apparent to you that the City of Tupelo proposes to require the consumers of power to pay all of the costs of the electricity which is furnished to them. Instead of the taxpayers subsidizing this enterprise, they are going to benefit in two ways. First, they are going to receive taxes from the publicly-owned utility, and second, they are going to receive a return on their equity which will go toward the relief of taxes.

As consumers, the residents of Tupelo will be afforded a much wider use of electricity than they have found possible under the higher rates in effect before the City was served by TVA power. An average home, using electricity for lighting, refrigeration, a vacuum cleaner, irons, and other [fol. 3673] electric appliances, will consume about 70 kilowatt hours a month. At Tupelo, the cost of this service would be \$1.90. For a home that uses an electric range in addition to a variety of other appliances the consumption would be about 250 kilowatt hours a month. At Tupelo, the householder would pay \$5.00 for this service.

So much for the first objectives of the Tennessee Valley Authority—the regulatory, public control purposes of this national power policy. We come then to the second objective, of at least equal significance.

The power program of Congress and the President has as its major objective a constantly wider use of electricity. The fundamental problem of the Tennessee Valley Authority, of the electric industry, of the Federal Government, is to devise economic ways and means to make electricity generally available, of promoting the widest possible use of power in the home, on the farm and in the factory. I have referred to the fact that at the present time the average monthly use of electricity for domestic purposes is about 50 kilowatt hours. That figure is a challenge to the electric industry and to the people of the country. We know that the figure of 50 kilowatt hours a month can be increased several times, for in some sections of our country and in our neighbor country of Canada that very thing has been accomplished.

[fol. 3674] Here, then, is the crux of the power problem in the United States today: The people need and want elec-

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tricity. We have an almost unlimited source of supply. The problem is how to put this electricity into the homes, the farms and the factories of the United States.

It has been long recognized that there are two barriers to the fullest use of electricity. The first has been the barrier of high rates. The second has been the barrier of high-cost electric using appliances. We are now undertaking in the Tennessee Valley area a plan which may offer the means of breaking down this second barrier.

The utilities' position has been that until the use of electricity is greatly increased, rates cannot be drastically decreased. They urge, moreover, that until electric-using equipment is brought down to lower price levels, no great increase of domestic consumption is possible. Appliance manufacturers have contended, on the other hand, that unless electric rates come down, volume production of equipment is impossible, and without this volume production, the cost of appliances cannot be substantially reduced.

Electric utilities, manufacturers of appliances and the consumers have all suffered in this closed circle. Here was [fol. 3675] an opportunity for government represented by the Tennessee Valley Authority, to step in as a stimulator and coordinator—helping not only the manufacturers and utilities, but making possible to the family of low or average income a wide use of electricity. The Electric Home and Farm Authority, created by order of President Roosevelt, is the agency which will assume this role. Conferences have been held with the electric manufacturers of the country. It has been decided that Electric Home and Farm Authority could make the attack on high-cost appliances in five ways:

First, by assisting in financing the consumer in purchasing efficient electrical equipment for home and farm at low prices.

Second, by obtaining reductions in electric rates by agreement with the utilities, publicly and privately owned, so as to make use of this equipment possible for the average householder and farmer.

Third, by engaging in educational work and research to lower still further the cost of electric equipment and to make it better adapted to the needs of the average home and farm.

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Fourth, by encouraging the production of new designs. This has already resulted in the creation of a combined range and refrigerator, and other totally new designs are [fol. 3676] soon to appear.

Fifth, by protecting the consumer against poor appliances, by setting up specifications and testing laboratories.

Through the active cooperation of about fifteen manufacturers, EHFA is prepared to launch its electric equipment program next month. The first items offered will be electric ranges, refrigerators, water heaters, a portable farm motor and an electric water pump. All of these appliances have been built by the manufacturers to meet price and quality specifications of the Authority: The prices are from 25% to 35% lower than those now prevailing for equivalent equipment; the financing costs are far below present charges for this service.

In order to identify this line of appliances, each item will carry the emblem of the power department of TVA, so that the purchaser knows then he sees this emblem on an appliance that it is a part of the program. Sales of these appliances, through the regular dealer outlets, will be made first in those Valley sections served by TVA power, and in the territories served by privately-owned public utilities which are under agreement with Electric Home and Farm Authority. This program begins early next [fol. 3677] month in four Southeastern states, and will probably be expanded.

What is going to be the effect of the Authority's power program on the investor in soundly financed public utility securities? This is an acute and difficult question which I have no desire to evade.

The Authority must carry out the national policy entrusted to it. It must acquire a market for its power. It must work toward a wider use of electricity. None of these objectives will result in the predicted calamities to the industry and its bona fide investors. The Authority early adopted a policy of buying, at fair prices, the property of private utilities in the area selected for its "yardstick" operations rather than to duplicate facilities and engage in destructive competition. The policy was given concrete expression in a comprehensive contract entered into on

COMPLAINANTS' EXHIBIT No. 839 (Excluded)

January 4 of this year with the major operating companies of the Southeast embraced in the Commonwealth and Southern system. In order to avoid competition between the City of Knoxville and the Tennessee Public Service Company operating in that city, and a duplication of physical facilities, the Authority has offered to buy that Company's property useful for electric operations at a price which will protect every dollar of presently useful investment. You can see, therefore, that if there is a genuine [fol. 3678] desire to work with this project, and not to obstruct or destroy it, ways and means can be found for the electric industry and for the Government to work without friction in expanding the use of electricity for the benefit of all of our people.

This, then, the *the* national power program which the Tennessee Valley Authority is carrying forward. I believe you will agree with me that it is a constructive program, that its sole object is to benefit and to protect the consumer of electricity and to make for a constantly wider use of electricity by the housewives of America.

One might suppose that such a program would be safe from selfish attack. That is not the case. There has been launched a concerted and apparently well-financed plan to destroy this entire project. As representatives of one of the most directly interested groups in the United States, it is appropriate that I should submit to you the facts representing this conspiracy to destroy the President's program in the Tennessee Valley and in other parts of the country.

According to reports in the New York Journal of Commerce, the American Federation of Utility Investors, Incorporated, had its genesis early this year in a committee formed after the annual meeting of one of the largest utilities [fol. 3679] holding companies. A report of this meeting in the New York Journal of Commerce, in its issue of January 11, stated that it was proposed that "the industry adopt an aggressive policy and arouse the stockholders to the fact that their interest was being jeopardized". The Journal proceeds—"It was suggested that it would be better for stockholders to make the move rather than utilities themselves". One of the great difficulties, to quote again from the Journal, "surrounding the formation of the stockholders committee was the securing of sufficient funds

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for expenses. Suggestions had been made that the utilities contribute. This, however, met with little approval, for it was felt that the movement would then be labeled as coming from the companies. Large investors, institutions, banks and insurance companies were approached with the result that the association has made subscription voluntary, in the amounts of one dollar or more a year from all members."

With this "independent" beginning, then, the Federation was organized. As the Journal said in this same account of January 11, "The American Federation of Utility Investors was formed by prominent men not identified with the utility companies, with headquarters in Chicago. It was felt by some that the movement originating in the [fol. 3680] Middlewest rather than in New York would immediately eliminate any feeling that it was being engineered by interests centered in the Metropolitan area."

So we see that this organization, if we are to believe the New York Journal of Commerce, from the very outset laid its plans to deceive the public of its true origin. To disguise its origin and alliance with the financial world of New York, it was decided that the Federation should have its headquarters in Chicago. The irony of protecting the Federation's fair name by moving it to Chicago, of all places, is almost overwhelming. According to a writer in the Chicago Tribune's financial department, the Federation of Utility Investors is circularizing utility investors with the aid of some of the largest utility holding companies, which he names.

The purpose of this movement is evident. In an attempt to save holding company capital superstructures, much of which never did have sound business justification; some holding companies, disguised in the robes of the widows and orphans, are ready to pit the securities owners against the consumers. Twenty million American homes are to be denied the full benefits of a great national resource in order that inflated stock may pay out. On such an issue there [fol. 3681] can be only one result. The tide of public opinion will continue to run against an industrial leadership which lends itself to such a scheme. The American people will never submit to a program of this sort.

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Private ownership of public utilities can survive and flourish, only if a new leadership takes the helm of the public utilities industry, a statesman-like leadership of moderation. There are many men in the industry, as I well know, who have the insight and the hard-heartedness to appreciate this fact, but they are sadly in the minority.

Among the changes the times demand of a new leadership, permit me to suggest four which seem to me of immediate and pressing importance.

First. The new leadership should demand a real housecleaning in the industry. No more change of names will suffice. The Insulls have fled the scene, but the practitioners of their business and political methods are still high in the councils of the industry.

Second. The public utility industry must cease to oppose every reasonable effort to strengthen regulations. The action of the utilities of New York State in opposing and almost successfully opposing, Governor Lehman's moderate program for the strengthening of public regulation, was an amazing performance.

[fol. 3682] Third. The public utility industry, like other conservatively operated businesses should write off or write down that portion of its capital structure which does not represent value. The policy of retiring capital obligations rather than continually refunding should be adopted. The uniformed investors who are misled should be advised of the facts.

Fourth. There should be a whole-hearted recognition of the right of the people to serve themselves with electricity if at any time they are dissatisfied with service through a private agency. The recognition of this right carries with it an implied duty to refrain from interfering with the free exercise by the people of their right to choose this course. Such an attitude may be represented by a quotation from the president of one of the large holding companies. Referring to his previous opposition to Government operation of Muscle Shoals, he said: "However, the President and the Congress of the United States declared that the policy of the Federal Government should be otherwise. Under the

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circumstances, we felt that policy and a due regard and respect for the judgment of those to whom the welfare of the nation had been committed, compelled us to permit the declared policy of the Federal Government to prevail."

[fol. 3683] These are the essentials of a new policy which the electric industry must pursue before it will be restored to a sound business basis and to public esteem.

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[fol. 3684] COMPLAINANTS' EXHIBIT N) (Excluded)

TVA Press Release of April 25, 1934

"Catch"

John Zwinak spun an artist's ruler toward his friend Gene Davis, saw it caught and clutched by taut arm and hand.

So came to Zwinak the idea for the Electric Home and Farm Authority's appliance emblem—a flashing symbol of power, held by the hand of man, over the legend, "TVA Electricity For All."

Zwinak is a commercial artist on the staff of Young and Rubicam, Inc., New York agency working with the Electric Home and Farm Authority.

Once the idea was his, Zwinak reduced it to finished design, submitted it to Young and Rubican and to the Authority.

After Acceptance—Patent

The Electric Home and Farm Authority and its parent, the Tennessee Valley Authority, wanted assurance of absolute control over the emblem's use.

They called upon the Department of Justice, the Patent Office and the Library of Congress.

All cooperated. The TVA emblem followed the Blue Eagle on a record trip through the patent maze.

The patent makes certain that the emblem may be used [fol. 3685] only as the Authority permits. Its appearance on an appliance means:

(1) The appliance has been accepted by the Tennessee Valley Authority for financing by its subsidiary development agency, the Electric Home and Farm Authority.

COMPLAINANTS' EXHIBIT No. 840 (Excluded)

(2) It has been built to specifications assuring high quality at a minimum price.

(3) It is for sale in a locality served at TVA-approved power rates—rates cut to meet the Tennessee Valley Authority's standards of fair service and fair cost.

[fol. 3686] COMPLAINANTS' EXHIBIT No. 841 (Excluded)

TVA Press Release of April 26, 1934

Permanent displays of electrical equipment will be set up by the Electric Home and Farm Authority at Tupelo, Miss., Wilson Dam, Ala., Chattanooga and Knoxville.

President David E. Lilienthal announced the plans today.

Tupelo's display early in May will launch the first sales of equipment approved by the Tennessee Valley Authority.

The Wilson Dam exhibit will be an electrified home, an electrical center for the thousands of visitors to the dam and power house there.

Chattanooga's display will be in the James Building and will be made a center of electrical demonstration for the Chattanooga territory.

The Knoxville show room in the Arnstein Building will include an indoor reproduction of one of the houses built at Norris, the Tennessee Valley Authority's village near the dam.

A Norris house also will be built into the Chattanooga [fol. 3687] show room.

All the displays will be complete showings of equipment accepted by the Tennessee Valley Authority and by the Electric Home and Farm Authority, and stamped with the TVA emblem of low cost, high quality and cheap current—an upright arm and hand, holding a zigzag symbol of power.

The Chattanooga, Knoxville and Tupelo show rooms will exhibit some electrical wonders not ordinarily used in the home. There will be an "electric eye"—a photo-electric cell that translates light or heat into electrical energy, and finds a multitude of strange uses.

At Tupelo, the first equipment offered for sale with TVA approval will be shown with a general line of home and farm appliances.

COMPLAINANTS' EXHIBIT No. 841 (Excluded)

The Wilson Dam house will be a three bedroom house, electrified from basement to attic.

An electrical air conditioner will cool it in summer, heat it in winter. Electric range, refrigerator, dishwasher, water heater and smaller kitchen appliances will be there for cook and housewife.

Laundry equipment will be electrical. There will be other electrical aids for housekeeper or maid. In addition, the [fol. 3688] house will have an auditorium annex. Tourists may go there to rest, and to see and hear the electrical idea demonstrated.

Movies will show how electricity may be used in home, factory or on the farm.

Trained electric home specialists will tell how to get the most from home appliances.

Tupelo's display first will be in downtown quarters obtained for the sales demonstrations. The display will be made permanent later.

[fol. 3689] COMPLAINANTS' EXHIBIT No. 842 (Excluded)

TVA Press Release of May 16, 1934

Address by Arthur E. Morgan, Before The Lower Tennessee Valley Association, Murray, Kentucky, May 16, 1934

We are looking forward to the day when every hamlet will have its own power supply, at such a low rate that a very small factory can plug into the wall and go to work. We want power because power takes the drudgery out of [fol. 3690] life and makes industry possible. As you go over these hills in Tennessee, you often see an old mill race that leads half a mile to an old mill, which developed four or five horsepower. A lot of work had been done for so little power. Today you can buy a motor for \$150 which will do that much work. I believe that one of the reasons why small industries have died out is that power was so expensive that it could be bought only by big units. If cheap electrical power had been available a hundred years ago, I doubt if the big units ever would have secured the hold on industry which they have.

COMPLAINANTS' EXHIBIT No. 842 (Excluded)

For about ten years there was a fight to prevent the power which could be generated in the Tennessee Valley at Muscle Shoals from being used for the people. Twice Congress passed bills providing for that power to serve the people. Twice they were vetoed. The third time the bill was passed as part of the Tennessee Valley Authority Act, it was sponsored by the President and supported by him.

I am not at all certain that the United States Government should make all the power to be made. I am not certain but what private utility companies are good things. I think I should be averse to having the Government take over all the [fol. 3691] power at the present time. I believe this reflects the President's attitude.

About a year and a half ago the President in speaking on the subject of power made this remark: "I believe we need a yardstick for power." What we pay for power represents not only the cost of the power itself, but sometimes it includes also the cost of watered stock. I might add that we sometimes pay for the cost of buying favorable decisions from public utility commissions. An example of that was seen in the case of Insull, who gave, off-hand, a present of a quarter million dollars to the judge who was deciding his case. The President said, "Let us eliminate such items. Let the Government make power and distribute it and sell it, and find out how much it actually does cost." I think the private utility companies should be enthusiastic about such a program. They know that they can develop power cheaper and they should welcome an opportunity to prove it finally.

The Tennessee Valley Authority expects their hearty co-operation.

We are trying to set up an accounting system so that everything will be open and above board. All charges are included—depreciation, maintenance, taxes—to give us a fair and honest comparison between public and private operation [fol. 3692] of utilities. The communities to which we sell power are required to do business in the same open way. Several months ago we made a contract with the city of Tupelo, Mississippi. For some months it has bought power from the Tennessee Valley Authority. It is now paying a little less than half what it was paying formerly. It distributes that power to its customers at a little less than half what they were paying formerly. Since the price of

COMPLAINANTS' EXHIBIT No. 842 (Excluded)

power has come down, the use of it has gone up. People can now afford to use more. And I am happy to say that up to the present, the increase in the use of power has been enough that the city of Tupelo is paying all of its charges, its depreciation, its interest, its maintenance, its taxes, and is saving a few thousand dollars a month besides. The rate for power in Tupelo is three cents per kilowatt for the first fifty kilowatts. For the next 100 kilowatts, the rate is two cents. For the next 200, it is one cent. After that the rate is slightly less than one-half cent per kilowatt. At those rates Tupelo is making money selling power which it is buying from the Tennessee Valley Authority at about four mills. We believe that if we can distribute power to small communities at a price which people can afford, so that power will be no longer a luxury, the use of it will increase [fol. 3693] tremendously. We believe that there is now an under-consumption of power, due largely to excessively high rates.

The city of Tacoma, Washington, has owned its own power plant for forty years and has paid for it from charges made for electricity. The plant is completely paid for except for improvements made in the last five years or so. Its rates are about the same as those which the city of Tupelo is charging: three cents for the first 100 kilowatts and two cents for the next 200, and then one cent. At those rates the city of Tacoma has built a great power plant, paid for it, and the people are using two or three times as much power as is used in the city of Knoxville, a city of about the same size, where the cost is twice as great. We hope soon to serve Knoxville with our power and expect the use of power to increase as a result of the lower rates which will be charged.

In the Tennessee River Area, the river drains about 40,000 square miles. There are thousands of miles of water courses. The fall from the high power plants in the mountains to the Ohio River is over 2,000 feet.

There are two kinds of power plants possible in the Tennessee Valley. One is what is called a run-of-the-river [fol. 3694] plant, one in which there can be very little storage. The water must be used as it comes down the river. The plant at Muscle Shoals is of this kind. When the river is low and little water runs through, there is little power de-

COMPLAINANTS' EXHIBIT No. 842 (Excluded)

veloped. When the river is high and there is a great deal of water running through, there is a great deal of power. Last summer during the dry months the river was so low at Muscle Shoals that we could get only 25,000 kilowatts, about 35,000 horsepower. In a wet winter, we can develop as high as 600,000 kilowatts—nearly twenty-five times as much. The variation from high to low is too great.

Operation of the Muscle Shoals plant alone would not be profitable. The cost of making the power is too much. Power is valuable only when it is dependable. Dependable power, or prime power as it is called, is worth five or ten times as much as secondary power. No one would care to buy power from a firm which should say, "You may have the power in the winter, but not in the summer and fall." Power is valuable chiefly when it is available the year round.

At the headwaters of the river, there is a different situation. We are building the Norris Dam on the Clinch River. [fol. 3695] There is great storage space behind the dam. The dam will be 253 feet high and the reservoir will store almost a whole year's flow of the river. By using that dam and its storage reservoir together with the dam below, we have a very different picture. For example, Muscle Shoals ran down to 25,000 kilowatts last summer. If Norris Dam had been operating with it, we should have saved the water at Norris during the wet season when there was plenty of water in the Tennessee; then in the dry season, when the Tennessee was low, we should have released the water at Norris and let it run down the river to Muscle Shoals. We could have raised the 25,000 kilowatts to about 100,000 kilowatts last summer, making four times as much power because of the water let down from Norris Dam. We could use the whole supply stored at Norris Dam at Muscle Shoals in the months the water is low, making power both at Norris Dam and as the water goes down the river again at Muscle Shoals, and at any other dams which may be placed down the river.

Now suppose there are eight dams on the river. At every one of these, the water from Norris Dam will make power again. It is this joint operation that makes it worthwhile to build the dams. Any one might be too expensive alone. The [fol. 3696] power generated at Norris alone would not be worthwhile but when the water can be used eight times

COMPLAINANTS' EXHIBIT No. 842 (Excluded)

more, it becomes a profitable development. There is room for about a dozen large dams on the headwaters of the Tennessee, dams that will store vast amounts of water. If we can build these dams to store the water, we can almost even out the flow of the river, making every dam on the Lower Tennessee worth three, four or five times as much as it would be worth if it had the natural flow of the river only.

The Tennessee River System, therefore, should be developed as a whole, under one management. Suppose the dams were built under different managements. For example, the Aluminum Company of America has a dam on the headwaters of the Tennessee. It uses its water when it needs power to run its plant. It may use the water in winter, the wet season, when there is already enough in the river, and shut it off in summer when the water is most needed below. If that dam were a part of one unified system, that water would be used when it was most necessary, taking the river system as a whole. The upper plant would be more valuable because its power could be used when it was most necessary; the lower plant would be more valuable because it could be supplied with water when it most needed it. The two plants operated together will be worth perhaps [fol. 3697] three times as much as they would be worth if operated separately.

It would hardly be fair for the Government to go to the expense of building these great dams up on the headwaters, then to get no benefit from them at the dams down river. There must be unified control. In the midsummer, when the Tennessee River is low, little power at the Aurora Dam, for instance, in Southwestern Kentucky, could be developed. At another time of the year, when the Ohio River flooded, the water from it will back up to Aurora Dam and there will be little fall there to develop power. Thus, both in high water season and in low water season, Aurora Dam would be unprofitable alone. But it will be tied to other dams, with transmission lines to carry current. In the low water of summer, the dam will be supplied with water by the storage dams up river. In the high water of spring, it will be supplied with power by transmission lines from the up-river plants with which the Ohio does not interfere. Thus, in both high and low water seasons, the Aurora Dam

COMPLAINANTS' EXHIBIT No. 842 (Excluded)

will be worth more by operating it with the other dams than if it were run alone.

For this it is necessary to have government control. If the dams were privately owned, no one could compel the owners below to buy power from those above. No one could [fol. 3698] say, "We are going to let water down, and your charge will be so much." The only way for the full development of the river system is to operate the whole as a single organized unit with unified control. With transmission lines connecting these dams, we will have a system of far greater value to the community than if the dams were operated independently of each other. Every dam built on the headwaters will be partly paid for by the dam down the river, which will furnish a market for the stored water. * * *

Some time ago I talked to a group of our foremen. They know that no private company is making money out of this job. They know that there will be no dividends—that we are making power so that people may buy it cheaper. The men feel this too; they are being treated well, paid well, and they will deliver the goods and see the President through. That kind of spirit will build dams and power plants, and will build a country with a prosperity which will be permanent.

[fol. 3699] COMPLAINANTS' EXHIBIT No. 843 (Excluded)

TVA Press Release of May 17, 1934

The Tennessee Valley Authority and the Investor

Remarks of David E. Lilienthal, Director and General Counsel, Tennessee Valley Authority, Before the National Association of Mutual Savings Banks, New York, May 17, 1934—Hotel Waldorf Astoria

The protection of the investor is a matter of immediate concern to your national Government. As you know, the President, on several occasions, has expressed his views upon this subject. Under his leadership legislation has been enacted, and other legislation is pending, designed to protect the investor. The credit agencies of your Government have fought a gallant battle for the institutional investors. Other federal departments have been working to the same end.

COMPLAINANTS' EXHIBIT No. 843 (Excluded)

In common with these national agencies, the Tennessee Valley Authority, within the sphere of its own operations, is likewise committed to a policy of protection and of fair play for the investor. You know, I believe, in a general way at least, that the duties of the Tennessee Valley Authority [fol. 3700] encompass a wide field in the planned development in seven states of an entire river watershed. It is particularly in connection with the power program of the Authority that the problem of justice to the investor arises.

In discussing the power policies and plans of the Tennessee Valley Authority, it seems to me important that we first consider the position of the institutional investors in the electric industry as a whole.

The savings banks, the insurance companies and fiduciary institutions of various kinds supply a major portion of the capital for this extensive industry. This capital is secured at a very low interest rate. The senior securities of well-financed operating utilities yield a rate of return comparable with that of municipal bonds. These senior issues have been generally regarded as attractive by investment bankers and have been widely recommended for bank and trust fund portfolios. But in the face of the fact that these institutional investors have supplied billions of capital to the electric utilities at a low return, the voice of the senior security holder has rarely been heard in the management of public utilities properties. The fate of billions of dollars of senior securities is determined by the policies of a small [fol. 3701] management group holding but a negligible fraction of the common stock, and with little of their own money at stake. I need not go into the legal and financial reasons for this state of affairs. For our purposes the fact is the important thing.

The almost insatiable need for new capital in this great business of electricity you have supplied, in major part—you of the savings banks, the insurance companies, the trust funds. The fate of your billions of conservative capital has been put into the hands of a managerial minority. Have they justified your trust and confidence? We all know that some have, and their record is a matter of pride to business men everywhere. But these bright spots are not typical. The record of these management groups as a whole is not creditable.

COMPLAINANTS' EXHIBIT No. 843 (Excluded)

The record shows that important common stock management groups have in effect been steadily confiscating senior security values. Your investment has been sapped in a variety of ways. One of these I can illustrate by reference to certain prosaic documents I hold in my hand. These pamphlets are the annual reports of the directors of two outstanding electric operating properties—Commonwealth Edison Company and Public Service Company of Northern [fol. 3702] Illinois, for the years 1932 and 1933. These properties operate in one of the richest territories in the country and under most favorable conditions. I have no doubt that there is hardly a savings bank represented here whose depositors have not contributed heavily to the senior capital of these excellent businesses.

Turning first to the consolidated surplus account *for* the Commonwealth Edison, on page 19, we find that the directors of this company in a single year found it necessary to write off over \$45,000,000 against surplus, reducing the surplus from \$53,500,000 to \$6,900,000. Some of the items in this write-off against surplus deserve your attention. In the first place we find a so-called investment reserve of \$30,000,000 set up. It appeared that the management of this company through a non-utility investment subsidiary had been making enormous outlays in all manner of enterprises, from truck factories to suburban real estate, investments which everyone here would agree no conservatively operated quasi-governmental business should have considered. The reserve was to absorb the losses of those ventured. Even that investment reserve was found inadequate, for in the 1933 report we find an additional charge of \$7,000,000 against surplus to care for shrinkage in value of the so- [fol. 3703] called investments of the subsidiary. Some of the other items in this surplus account are interesting. Here is an item of \$3,750,000 for "losses in connection with transactions in company's re-acquired stock." This company, through its subsidiary, was engaged in the practice of buying the company's stock in the open market, for purposes which do not stand very close scrutiny, when taken in connection with the management's intensive stock selling campaign among customers and helpless employees. Then there is an item of \$1,665,000 for "advances and loans of

COMPLAINANTS' EXHIBIT No. 843 (Excluded)

stock to officers and employees and to individuals connected with affiliated companies."

Let us turn now to the annual report of the Public Service Company of Northern Illinois. Here we find that in 1932 and 1933 the management wrote off a total of \$18,500,000 to take care of the shrinkage in value of securities in all manner of outside enterprises, similar to those of Commonwealth Edison. Charges against the reserve included a half million dollars in advances and loans to officers and employees and to individuals connected with affiliated companies, and \$1,730,000 in connection with losses in stock market operations involving the company's own securities. [fol. 3704] I need hardly point out that I am not criticising the write-offs put into effect by new management, but rather the financial policies extending over a period of years which made that action necessary.

These reports tell a story of confiscation of values of senior securities. Furthermore, the effect of this management policy has been to make rate reductions much more difficult for these companies, and to that extent has made the general public relations of these companies less favorable. All of this reacts adversely to the holders of bonds.

I wish these were the only instances in which senior security values have been confiscated by management policies. You and I know that the instances are legion. Another common method of confiscating senior security values has been through the abuse of the management and engineering fee. By this device the common stockholders of an operating company were able to draw off not only a generous dividend on their stock holdings, but additional compensation for alleged services. Grossly inadequate provision for depreciation, resulting in over-statement of income, followed by an excessive payment of dividends, frequently out of capital, has been another method whereby many an unfaithful or speculating management has [fol. 3705] siphoned out the assets of operating companies while your senior securities suffered. The records contain instance after instance of such confiscation of values.

Some of the more flagrant abuses in the industry have recently been revealed to the investing public through the instrumentality of federal agencies. These revelations have aroused general public condemnation. From certain quar-

COMPLAINANTS' EXHIBIT No. 843 (Excluded)

ters purporting to be independent, but actually associated with management groups we are told that the industry's ills arise from the various activities of the Federal Government and of regulatory commissions. An honest, dispassionate analysis fails to sustain this charge. Where investigations of utility affairs disclose illegal and unsound practices the Government has not hesitated in making such disclosures known to the consuming and investing public. Nothing less than this would discharge your government's duty to protect the investor. The preservation of investment values demands that corporate structures be soundly established, that abuses be revealed, and that physical and financial operations be correctly reported to the public.

The electric industry has grown at a rapid rate and is destined to continue to grow. Further growth will require [fol. 3706] fresh capital. Fresh capital will be forthcoming from the public only to the extent that it is convinced that the industry is managed in accordance with high standards. If the private utilities are unable or unwilling to clean the slate, they will find it very difficult to convince investors to risk further capital in this essential business. In the national Government's attempt to curb holding company abuses, to assure honesty of accounting, to simplify corporate structures, and to achieve security in fact for investors the Government is working in the long-range interest of all. If the industry, or any of the groups which have an interest in it, oppose this constructive program, it may find itself in a position where it will be difficult to secure fresh capital for the expansion which lies ahead.

By 1933 the management of some of our major electric utilities had become a national scandal. It was inevitable that President Roosevelt and the Congress should squarely face this situation. It was inevitable that they should see that regulation alone was inadequate to fully protect either the consumer or the investor. It was plain to all that regulation needed strengthening and needed supplementing.

Neither the industry nor the investors took effective action to meet this situation. The President and Congress, [fol. 3707] in setting up the Tennessee Valley Authority, were merely responding to an overwhelming public sentiment. The public, investors and consumers alike, demanded an experiment on a broad scale, of public electric operation.

COMPLAINANTS' EXHIBIT No. 843 (Excluded)

This development was designed to serve as one means of seeking to prevent a continuation of financial and operating practices which had brought discredit on the entire industry, sound and unsound managements alike.

As institutional investors, you will be interested principally in those plans and policies of the Authority which most directly affect the investment quality of the securities of the electric industry.

The Authority is under duty to acquire a market for its power. It is authorized to compete with existing utilities, and for this purpose is expressly empowered to erect duplicate facilities. But no competing facilities have been constructed, and I am authorized to say that under its present Board none will be constructed, until every reasonable alternative has been exhausted. The Authority, in public and in private, has urged this same principle of reasonableness upon municipalities in its area.

Last August the Authority made the following declaration of policy:

[fol. 3708] "Every effort will be made by the Authority to avoid the construction of duplicate physical facilities, or wasteful competitive practices. Accordingly, where existing lines of privately-owned utilities are required to accomplish the Authority's objectives, as outlined above, a genuine effort will be made to purchase such facilities from the private utilities on an equitable basis."

This policy the Authority is determined to carry into effect. On January 4, 1934, after months of negotiation a contract was entered into between the Tennessee Valley Authority and the four major operating companies of the Southeast, members of the Commonwealth and Southern system. Under this contract the Authority agreed to refrain from competing with the Commonwealth and Southern companies in certain areas, and the companies agreed to sell their properties in these areas at a price reached by negotiations. A complete interchange arrangement was effected which ties these two systems together as two private utilities would be tied together. The contract calls for cooperation between the parties in working out a program to further increase the use of domestic electricity. This contract is concrete evidence of the Authority's desire to avoid con-

COMPLAINANTS' EXHIBIT No. 843 (Excluded)

[fol. 3709] structing duplicating facilities or to engage in destructive territorial competition.

To avoid duplication of facilities, to avoid territorial competition, to buy property at fair prices, are cardinal policies of the Tennessee Valley Authority. Our adherence to these policies should reassure you of the Authority's determination to respect prudent investment in useful property.

But more important still to you as institutional investors in this great industry is the program under way to increase the use of electricity for domestic, rural and industrial purposes. This project of the Authority, created by order of the President of the United States, and backed by a million dollars of capital and ten million dollars of credit, is being launched next week throughout the Valley. This undertaking holds great promise for the stabilization of earnings for this whole industry. For obviously if the experiment is as successful in the Tennessee Valley as experienced private utility operators predict, then it can be adapted to other sections of the country.

By direction of the President the Authority has established an agency known as the Electric Home and Farm Authority. This corporation will make possible the sale [fol. 3710] of low cost appliances to a large portion of the population which hitherto could not afford complete electric service in the home. These appliances of course, are made by leading manufacturers and sold through the regular dealer outlets. The EHFA is extending these load-building facilities, not only in the territory of its own operations, but also to the territory served by the extensive Commonwealth and Southern system and other privately-owned utilities which desire to cooperate. The Authority is interested not merely in the expansion of its own electric sales; it is interested in increasing the consumption of electricity throughout the South, in disregard of public or private ownership. We are entering upon a program of technological research which may yield important results in uses of electricity for both domestic and industrial purposes. This program will result in expansion of output and in stabilization of the industry as a whole. It cannot therefore fail to be of interest to you as investors.

COMPLAINANTS' EXHIBIT No. 843 (Excluded)

Public policy and business policy point to the utility industry as a principal repository of the conservatively invested funds of the country. The industry has all the characteristics which should commend it to the conservative [fol. 3711] investor. It is public in its nature, even enjoying the power which only the sovereign state enjoys—the power of condemnation. It has stability. In spite of the financial mayhem committed upon it, its earnings record through the depression is remarkable. It furnishes an essential commodity. It enjoys almost complete protection against territorial competition. It is a matter of national importance that an industry so intimately related to the public welfare should be so operated as to make it a safe repository for the funds of great institutions, such as your Mutual Savings Banks.

There is no basis for the hysterical cries of those who see, or pretend to see disaster ahead for the electric industry. Can it be that they are deliberately trying to depress the prices of sound senior securities, so that they can be bought in at hysteria prices? This may be a subject which would merit investigation by public agencies, and perhaps by senior security investors, such as the Association of Mutual Savings Banks.

We have been given a national power policy to execute in the Tennessee Valley. It is intended to serve as a demonstration and an experiment. It answers an overwhelming public demand, after a decade of experience injurious [fol. 3712] to both investors and consumers. Under this new policy prudent investment in useful property will not only be respected but protected. We believe that this limited operation of a public power system will set up a precedent of trusteeship in this business which will have a sound effect upon the financial policies of private utilities, and will work to the advantage of the institutional investor in this great industry.

[fol. 3713] COMPLAINANTS' EXHIBIT, No. 844 (Excluded)

TVA Press Release of May 18, 1934

Address by Dr. Arthur E. Morgan Delivered to the Civic Clubs of Huntsville, Alabama, May 18, 1934

People of Northern Alabama: . . .

Let me give another example of what planning could do. The Tennessee River is one of the great power possibilities of eastern United States. Only west of the Rockies or along the St. Lawrence are there any sites superior to it. It is possible to develop several million horsepower of energy on the Tennessee River. The development of that power will depend to a considerable extent upon the planning of it. If the various power projects are developed independently of each other, the development will be only a fraction of what it will be if a single unified plan can be carried through. Let me give an example. The Muscle Shoals Dam down here is a great piece of masonry. Only three or four dams in the world have as much concrete in them as the Wilson Dam at Muscle Shoals. That dam, taken by itself, is not a good investment. It is not a good investment because it is on a river that fluctuates very much between low water and high water. Last summer during the low water season, there was only water enough in the Tennessee River at Wilson Dam to develop about 25,000 kilowatts. In some wet winters we have had enough water to develop 600,000 kilowatts or twenty-five times as much. That is the extreme fluctuation of the river.

There is no storage to speak of at Wilson Dam. You [fol. 3714] must take the water as it comes, and taken alone it is not a good investment. Power is good only if it is reasonably continuous. This is not exactly true, but roughly, valuable power is what is called dependable power or prime power. If a man wishes to buy power to run his factory, he doesn't want to buy power which he can have only certain months of the year, but he wants power that is dependable throughout the year. Therefore, prime power is worth five times as much, perhaps, as secondary power which comes only during the wet season. That is why Muscle Shoals alone is not a good investment. We have another dam we are building on the Clinch River—Norris Dam. Taken by itself, that dam is not a good investment. There is

COMPLAINANTS' EXHIBIT No. 844 (Excluded)

a great storage behind it, about enough capacity to store a year's rainfall on the river. But it is expensive to build that dam. Speaking from memory, as I recall, it will cost about \$240 per kilowatt to develop that power, taking it by itself, as against perhaps \$80 per kilowatt to build a steam plant. So Norris Dam alone could not be compete with steam plants. But when you take Norris Dam above and Wilson Dam below and make one operating unit, you have a different situation. During perhaps nine months in the year (I speak generally because years are not alike) there is an abundant [fol. 3715] flow at Wilson Dam, enough to develop possibly 200,000 kilowatts. Then for a period in the late summer and fall, the river runs very low. Now suppose at Norris Dam, instead of taking the water as it comes, we saved it during high water when there is an abundance. Then, along in August, when the Tennessee River is low, let the water out at Norris, put it through the plant at Norris and make current there when it is most needed. But not only that—the water will go on down to Muscle Shoals and make power over again. You may use the entire year's flow in three months and that is enough to fill in the gap at the low water time, so that at Muscle Shoals you have three or four times as much dependable power as you would without Norris. Together they are profitable; alone they are not.

It is not only Wilson Dam that Norris will help. There is already a dam at Hale's Bar, owned privately. The building of Norris Dam will make it worth three times as much (speaking in rough figures—I would like to have my figures checked) because of the regulating influence of the reservoir above. Private capital built that lower dam and under present condition private capital would have a gift of, say, 300 per cent at government expense. Then the water [fol. 3716] will come to Wheeler Dam and make it worth two or three times as much.

There is room for possibly eight dams on the river, and the water from Norris, if properly handled, will multiply by about three (speaking roughly) the value of them all. When you take that into account, you find what a profitable development you have in the Norris Dam. But that is not the only up-river dam. On the Holston, the French Broad, the Hiawassee, the Little Tennessee, there are great storage

COMPLAINANTS' EXHIBIT No. 844 (Excluded)

possibilities. If we took advantage of all, we could even smooth out the flow and get almost a uniform power load throughout the year. When there is a great deal of rain, and the smaller tributaries of the Tennessee are full of water, the reservoirs will be shut down, and during dry season, the water will be let out. I believe it is safe to say that if the Tennessee River can be developed as a single unified development under one ownership and one control, hydro-electric power may cost not more than half as much as if it were developed in independent units. Now someone may say that this could be worked out by private ownership—that the private companies could agree about trading their power. That is no answer. Take the Norris Dam, for instance. It would not pay to build it in the hope that some-[fol. 3717] body might wish to buy its power in the future. It is not justified unless you can count on a market. That is true for other up-river dams. Suppose that they are owned privately and a factory on the Norris Dam is making some large product. The factory gets orders and runs when it gets orders. It may run in winter when there is plenty of water and shut down in summer when the lower plants need the water. You can only develop the full possibilities of the up-river dams by knowing you can get the water paid for at other dams down river. Therefore, the very building of the dams must be by some coordinated power. On one of the branches of the Little Tennessee, there is a dam owned by the Aluminum Company of America. That dam stores water and uses it when it has business for their industry. Now they let the water out when they need it not when we need it at Muscle Shoals. They are working for the Aluminum Company of America, so they regulate the power to suit themselves and not to suit the dams down stream. I believe that the way to get maximum value is to operate under unified ownership and control.

The cost of hydro-electric power is more important than you may think. With recent developments of steam generating plants, steam power is competing with water power. A good many power men will tell you the day of water power [fol. 3718] is passed,—that from now on steam plants will be built. If they must go back to operating unorganized, uncoordinated plants that may be true. But if we can carry this through as a single organized development, then we

COMPLAINANTS' EXHIBIT No. 844 (Excluded)

can make this power cheap enough so that I believe we can very well compete with steam power, and it may be that the industries of the Tennessee Valley in the future will depend upon whether this is developed in a unified way or whether it is developed in isolated and non-cooperating units. We are building with a view to the future.

Let me go into the matter of water power. It is probable that for a long time to come a very considerable part of the electric power of America will be generated by steam. There are not enough power plants to go around, and their situations are not right. We must depend upon steam plants. Coordination is not so necessary in steam plants—it is desirable, but not so necessary. The President has expressed himself on the electric power issue. He has said very clearly that he is not in favor of having the U. S. Government generate and sell all the power in the country. He said he believes it is wholesome for our country to have private ownership of utilities to a considerable degree, but [fol. 3719] he believes that private ownership has not always exercised a spirit of responsibility to the public. We cannot tell just when that spirit of responsibility is being exercised and when it is not. The affairs of private utilities companies are not given freely to the public. Only now and then does a window open and do we get a look inside. In the case of the Insull utilities, you know the mess that was there; what a horrible mess and jumble of over-capitalization it was—holding companies of holding companies piled ten deep. You know how the underlying securities had been taken for holding companies to gamble with their own securities. An infernal mess it was.

It should not be said that the Insull companies were representative of the utilities of the U. S. I do know, however, that I have talked with Mr. Insull and that two years ago, he spoke with righteous indignation of the abuses. He spoke of the crying conditions in the handling of utilities, of the need for conscientious good judgment. I have discussed the subject with him and heard these expressions of righteousness from his own lips. One of my associates—I do not mean one of the directors of the TVA but another associate—was engaged for a time as an accountant, auditing the books of one of the large utilities. He gave up the [fol. 3720] job because he did not care to be in such a busi-

COMPLAINANTS' EXHIBIT No. 844 (Excluded)

ness. He expressed his personal opinion that there is at least one other large organization in America which would compare in its management with the Insull companies. I am not certain but what there are others that would look somewhat the same if all the light were let in.

There are different kinds of management. Some of the companies are run with honesty and could show all their affairs to the public. In our own dealings, we have found decided differences of openness and fairness. There are some companies with which we could deal as with business men, with nothing to hide. Some are not open and above board. The President feels that in some way we should have an opportunity to know what power actually does cost. He has thought it would be a good thing to have a yardstick for power. One of his purposes in recommending the establishment of the Tennessee Valley Authority was to create a power yardstick. If the government can have a power project comparable in size to other power projects and can keep their accounts open and above board where everyone can see them, with a standard accounting methods and everything taken into consideration, we can begin to find out, first, whether the government can handle business [fol. 3721] efficiently; and second, if it can, what is a fair price for power?

We can argue about this for a long while. Perhaps a case will help us to settle the question. So we are in the power business. We have Muscle Shoals and Wilson Dam in operation. We are building two more dams—Norris and Joe Wheeler. We are already selling power to some extent, and I may say that in working with the power organizations in this region, we have found them cooperative. We have found a willingness to work along with us that has not been evident in certain other areas. Mr. Lilienthal has mentioned from time to time his pleasant experience in cooperating with the utilities in this region. We feel that we have been treated with fairness in agreeing with them. They may not want us in the power business, but since we are in it, we have found cooperation. We are selling power wholesale where we can. We have contracts with a number of communities to furnish power for them to retail. It takes quite a while to overcome all the obstacles when we try to work out such a contract. You have heard

COMPLAINANTS' EXHIBIT No. 844 (Excluded)

of our contract with the city of Tupelo, Mississippi, the first contract we made. Under our power contract with Tupelo, we sell them power for a little less than half what [fol. 3722] they were paying formerly. The city is retailing that power to its customers for a little less than half what the customers were paying formerly. The rates at which Tupelo sells power are about like this: 3 cents for the first 50 kilowatt hours; 2 cents for the next — kilowatt hours; 1 cent for the next 200 and after that the rate is 4 mills. (I am speaking from memory. This is in Mr. Lilienthal's field; he directs power development of the program; Dr. H. A. Morgan directs the fertilizer and agricultural program; and I am charged with the building of the dams and the general engineering projects, also the general supervision of the staff.) So the average cost for domestic use would get down as low as $\frac{3}{4}$ cent if a person would use about a thousand kilowatts.

It has been said that we have left the city of Tupelo to hold the bag—that we are selling the power at a reasonable wholesale price, but that the city will lose out in retailing it. We do not believe this is the case. Up to the present the city of Tupelo is keeping books as we have required. We have required the books to be kept in a certain way, using certain funds for operation, setting aside funds for amortization, for paying off the bond issue. Certain funds are set aside for depreciation, for surplus; and when these are taken care of, funds are set aside for taxes so that the [fol. 3723] plant will be paying regular taxes. All these things have been done. Last month, I think, for the month, the city had a margin of about 3,000, and this is a town of about 10,000 people.

[fol. 3724] COMPLAINANTS' EXHIBIT No. 845 (Excluded)

TVA Press Release of May 18, 1934.

The First Year of the TVA

(A Summary of Activities by the Tennessee Valley Authority From May 18, 1933, the Date of the Signing of the Tennessee Valley Authority Act, to May 18, 1934)

The close of the first year of the Tennessee Valley Authority sees Wilson Dam in "yardstick" operation, an ex-

COMPLAINANTS' EXHIBIT No. 845 (Excluded)

tensive electrification program launched in Mississippi, Alabama and Tennessee; the Norris and Wheeler dams one-fourth completed and four additional dams projected; a \$7,000,000 transmission line under way to further link these new sources of power; a demonstration fertilizer plant nearly completed at Muscle Shoals, and the great Tennessee River basin under the unified and planned control that President Roosevelt had in mind in creating the TVA.

Begun four months after the TVA directors held their initial meeting, the \$34,000,000 Norris Dam, on the Clinch River near Knoxville, is now two months ahead of schedule. This great storage dam will be 253 feet high and 1,800 feet long, and impound 3,600,000 acre-feet of water with a shore of 800 miles. The \$20,000,000 Wheeler Dam, 15½ miles [fol. 3725] above Wilson Dam in Alabama, will raise a 50-foot barrier 6,000 feet across the Tennessee River, backing its waters for a distance of 80 miles. Not authorized until October 13, 1933, Wheeler Dam operations proceeded so rapidly under the TVA organization, which by that time had been perfected, that unwatering the first cofferdam began exactly eight weeks from the day the first timber was driven. These dams will regulate the flow of water on the upper Tennessee and thereby increase the prime power of Wilson Dam, besides aiding navigation and flood control.

As a part of the development program for the entire river system, the Authority is surveying and doing other work preliminary to constructing run-of-the-river dams at Aurora, on the Tennessee-Kentucky border some 44 miles above the point where the Tennessee joins the Ohio, and at Pickwick Landing, in southeastern Tennessee near the Mississippi-Alabama line; a storage dam on the Hiwassee River, which empties into the Tennessee above Chattanooga, and supplemental impounding barrier somewhere on the French Broad River in the mountains of northeastern Tennessee.

Besides adopting a power policy and establishing rate schedules, the Authority has put into effect rules and regulations [fol. 3726] governing sale of its power. On October 27, 1933, it signed its first power contract with Tupelo, Mississippi. Since then it has entered into contracts to serve 11 other municipalities—Knoxville and Pulaski, Tenn.; Amory and Corinth, Miss., and Muscle Shoals, Florence, Athens, Sheffield, Tuscumbia, Decatur and Russellville, Ala.

COMPLAINANTS' EXHIBIT No. 845 (Excluded)

After three months of negotiations, the Authority acquired extensive private facilities in Mississippi, Alabama and Tennessee for initial distribution of Muscle Shoals power to as many as possible of the more than 200 municipalities which have applied for such service to date; has induced privately-owned utilities elsewhere in the area to make substantial rate reductions, and in northeastern Mississippi is embarked on the Government's first rural electrification program.

In popularizing the use of electricity, the TVA is aided by the Electric Home and Farm Authority, a supplemental corporation created by Executive Order of December 19, 1933. In cooperation with manufacturers and retailers, the EHFA on May 1, made low-cost electrical appliances available on long-term credit to Valley residents.

[fol. 3727] COMPLAINANTS' EXHIBIT No. 846 (Excluded)

TVA Press Release of May 21, 1934

Text of Addresses Delivered by Directors of the Tennessee Valley Authority over NBC Stations on May 21, 1934

Another issue is unified river control. The Tennessee River can be made to yield millions of horsepower, but if the various power plants are the unrelated work of "rugged individualism", there will be an enormous waste of power. For instance, if the power plants at Norris Dam and at Muscle Shoals are operated together, they will be worth more than twice as much as though they should be operated separately. The Tennessee River developed and operated as a unit can produce hydro-electric power at half the cost of unorganized development, with valuable by-products in flood control and navigation. Our nation must not suffer the waste which lack of planning of this great river system would cause.

At present two great dams are being built as part of this unified program. In the construction of the Norris Dam on Clinch River, and of the Wheeler Dam above Muscle Shoals on the Tennessee River, very rapid progress at very low cost is demonstrating that the Government can work with efficiency and economy. My fellow director, Mr. Lilien-

COMPLAINANTS' EXHIBIT No. 846 (Excluded)

[fol. 3728] thal, will discuss the power program of the Tennessee Valley Authority. * * *

By David E. Lilienthal:

Almost all of you who are listening in on this program of the NBC tonight have electricity in your homes. But the average household makes only a very limited use of electricity. The full benefits of electricity are enjoyed only by a few.

Electricity can relieve the women in twenty million American homes of much of the drudgery of housework. Electricity can make the home more comfortable and convenient. It is part of the job of the TVA to make electricity more widely available, to work out means whereby its full benefits may be enjoyed in the home of modest income. In the few remaining moments of this program, I want to tell you what we are doing toward this end in the Tennessee Valley.

Three barriers have stood in the way of a wider enjoyment of the benefits of electricity. First, the rates for service have been too high. The second obstacle has been the price of electricity-using equipment, such as ranges, refrigerators, water heaters, and other large appliances. And the third barrier has been a lack of knowledge of the manifold benefits of the electric home, and an understanding of all the ways in which electricity could be the servant of the average household.

The Tennessee Valley Authority is hard at work on a program to remove these three barriers to a wider use of electricity in the average home—the barrier of high rates, of high appliance costs, of inadequate knowledge of the uses of electricity. This program I can best describe by telling you of a concrete situation.

Down in northeastern Mississippi there is a remarkable little city of some 7500 people which will go down in history as the place where the average man and woman first really made full use of electricity. Tonight in the city of Tupelo these people are using current from Muscle Shoals supplied to them through the city's own electric distribution system. The TVA rates in effect in that city represent a reduction of sixty per cent. In April the homes of this town used fifteen per cent more; the stores used twenty three per cent more; the average use was thirty-five per cent more than a year ago.

COMPLAINANTS' EXHIBIT No. 846 (Excluded)

The people of Tupelo are demonstrating the TVA's point that really low rates will produce a tremendous increase in use, and is therefore not only socially desirable but also good business.

[fol. 3730] But unless these people in Tupelo who have a moderate income can buy electric appliances, the low rates will benefit them only in a limited way. Lower prices for standard quality electric home equipment are being worked out through an agency of the TVA established by order of the President. It is known as the Electric Home and Farm Authority.

With the cooperation of the leading electrical manufacturers of the country, the dealers, and the electric utilities, this agency has made it possible for housewives to own electric ranges, refrigerators, and water heaters at prices from twenty-five to thirty-five per cent lower than those heretofore prevailing. The increased volume of sales will result in a fair profit to the manufacturers and retailers, and a great benefit to the consumer as well.

The third point in the program—more complete knowledge of the uses of electricity—is being carried out in Tupelo this week, in the form of demonstrations in the best use of this great national resource. The home economics departments of the city, state and national governments are co-operating with TVA in aiding the housewife to learn what electricity can do to make her work less of a burden and her home more comfortable.

[fol. 3731] COMPLAINANTS' EXHIBIT No. 847 (Excluded)

TVA Press Release of January 22, 1935

Tennessee Valley Authority, Knoxville, Tenn.

What TVA Means to the Retailer

Advance Text, Remarks of David E. Lilienthal, Director, Tennessee Valley Authority, Before a General Session of the National Retail Dry Goods Association Annual Convention, January 22, 1936, 10:30 A. M., Hotel Pennsylvania, New York. • • •

One purpose of our sales is, of course, to help liquidate the investment which the Federal government has made in

COMPLAINANTS' EXHIBIT No. 847 (Excluded)

dams and other structures. But in addition, Congress specifically instructed TVA, in selling this power, to encourage increased use especially for domestic and farm purposes. This, we felt, could be done in only one way—by breaking the old stale-mate of high rates and low consumption and starting off with genuinely low rates, rates so low that they would bring about the increased use and lowered unit costs needed for successful operation.

To this end, our contracts with municipalities and co-[fol. 3732] operative associations contain not only a schedule of wholesale rates, but also the rates which the retailers agree will be charged the householder. These are often called TVA yardstick rates. These rates are low, though still not as low as we hope they may yet become. . . .

The publicity accompanying the launching of the TVA program aroused public demand for electric service. The Electric Home and Farm Authority, now on a national basis, assisted by providing lowered prices and easier finance terms for major electric equipment.

Similarly with electricity, the yardstick rates were designed to be low enough to produce volume, and they have done the job. Their influence is felt all over the country.
• • •

[fol. 3733] COMPLAINANTS' EXHIBIT No. 848 (Excluded)

TVA Press Release of December 30, 1935

Advance Text, Remarks of David E. Lilienthal, Director, Tennessee Valley Authority, at the Annual Meeting of the American Historical Association and the American Political Science Association, Chattanooga, Tennessee, December 29, 8.00 P. M. • • •

In other words, the first duty of the TVA Board with respect to the surplus of power not used for government purposes is to sell that power, and use the revenues to help pay the operating costs and repay the investment in the project.

The Board has a duty to secure revenues. But in securing those revenues, the widest possible use of electricity, particularly in homes and on farms, is specifically laid down

COMPLAINANTS' EXHIBIT No. 848 (Excluded)

as a policy to guide the Authority. Though the project must plan to support itself, the national policy is clearly one of maximum use, consistent with reasonable costs, not maximum financial returns. Some of the statutory language is unusually interesting and worthy of your study:

"The policy is further declared to be that the projects [fol. 3734] herein provided for shall be considered primarily as for the benefit of the people of the section as a whole and particularly the domestic and rural consumers to whom the power can economically be made available, and accordingly that sale to and use by industry shall be a secondary purpose, to be utilized principally to secure a sufficiently high load factor and revenue returns which will permit domestic and rural use at the lowest possible rates and in such manner as to encourage increased domestic and rural use of electricity."

In an interesting provision which I quote from Section 10, the statute expressly recognizes and emphasizes the deep social implications of electricity:

"That the Board is hereby authorized and directed to make studies, experiments, and determinations to promote the wider and better use of electric power for agricultural and domestic use, or for small or local industries, and it may cooperate with State governments, or their subdivisions or agencies, with educational or research institutions, and with cooperatives or other organizations, in the application of electric power to the fuller and better balanced development of the resources of the region." * * *

The component costs of producing and distributing electricity were to be recorded in such a way that they would [fol. 3735] form a useful and challenging basis of comparison—a yardstick of comparison—with costs in private and public operations in various parts of the country. In using such a yardstick of costs, due weight must, of course, be given to the underlying variables which affect every fair comparison of costs and rates.

But the yardstick is by no means a yardstick of costs alone. What TVA is doing on several fronts, pursuant to statute, furnishes equally useful yardsticks: for example,

COMPLAINANTS' EXHIBIT No. 848 (Excluded)

yardstick of mass consumption (about which I shall speak in detail in a moment); a yardstick to determine whether good wages and superior working conditions will result in low unit costs in construction; the extent to which electricity on the farm can be so used to increase the farmer's income; a yardstick for the integrated control of waters throughout an entire major watershed. . . .

In the contracts with municipalities for sale of bulk power not only the wholesale rate but also the rates the city will charge the ultimate consumer that are usually referred to as TVA yardstick rates.

I am not going to take you into an involved and lengthy discourse on the theory of price and cost in the field of electricity. But one principle of pricing must be clearly [fol. 3736] recognized, or the entire social significance of the yardstick is lost: the rate charged for electricity, within wide limits, determines the cost. No yardstick rate for domestic electricity, at least in my opinion, is worth serious consideration unless it is based on this principle.

But how to get wide use and in turn low costs? The answer of the TVA yardstick is: Low rates; genuinely low rates. Low rates will bring increased use, and increased use results in low costs. There are limits, but they are far off.

Some critics of this yardstick principle say: We want to charge low rates, but we can't lower rates further until we can cut our costs, and we can't cut costs unless people buy more electricity. Your yardstick rates would probably work if people used twice as much electricity as they do, but until they do, such rates are impossible.

And with a few exceptions that is the answer, too of the rate regulatory commission. With an eye fixed by the law on present costs based on present consumption of electricity, the Commission says:

"We can't order genuinely low rates because the lower rates would be below the cost of distribution. When people use more electricity, such rates would be feasible." In other words, in the regulation of rates under the fair value [fol. 3737] theory, plainly the cart is before the horse.
. . . .

COMPLAINANTS' EXHIBIT No. 848 (Excluded)

I do not want to minimize the difficulties or over-simplify the problem. The orgy of utility financial malpractice has left the operating managements with a legacy of crushing capital structures. To ask a utility management carrying such a load to take a step involving even a few months' reduction of revenue is expecting a good deal. Nor is this all. The sedative of tradition and the deep, dark mystery with which rate experts have surrounded their cult are not conducive to an original re-examination of electric rates.

The difficulties are great, I grant, but the — stake is great—nothing less than the electrification of America.

[fol. 3738] COMPLAINANTS' EXHIBIT No. 849 (Excluded)

TVA Press Release of April 10, 1936

• • • Financed by the PWA, Okolona, Mississippi, will complete approximately 40 miles of rural lines, some time in June, adding about 150 rural customers to its system. Okolona announced some time ago that it intends to electrify every farm home within 20 miles of that city.

[fol. 3739] COMPLAINANTS' EXHIBIT No. 850 (Excluded)

TVA Press Release of April 13, 1936

Adamsville, Tenn., April 13.—Fifty-six miles of rural electric distribution lines operated in McNairy and Hardin counties, Tennessee, by the Alcorn County Electric Power Association of Mississippi, will be transferred on Tuesday, April 21, to the newly formed Pickwick electric membership corporation, it was learned here today. Assurance was given that there will be no interruption to service.

[fol. 3740] COMPLAINANTS' EXHIBIT No. 851 (Excluded)

TVA Press Release—Undated

Jackson, Tenn.—The Pickwick Electric Membership Corporation, recently established to distribute TVA power in rural areas, will put 70 miles of rural electrification lines in operation in Chester, Hardin and McNairy Counties, in west Tennessee, on April 21st, it was announced by E. R. Wall, TVA division engineer for West Tennessee. These lines will serve approximately 450 customers.

The lines were built for the corporation by the Tennessee Valley Authority and will bring electricity into areas which have never before had electric service.

In addition to these lines, the Pickwick Electric Membership Corporation has taken over 56 miles of rural distribution lines in McNairy and Hardin Counties from the Alcorn County Electric Power Association of Mississippi. These lines form part of the corporation's present rural network.

[fol. 3741] COMPLAINANTS' EXHIBIT No. 852 (Excluded)

TVA Press Release of July 23, 1936

The Aluminum Company of America today became the first contractor of industrial power generated at Norris Dam with the signing of a contract between the company and the Tennessee Valley Authority, it was announced at TVA offices here.

The contract was executed as TVA began first preliminary tests on the huge Norris generating units.

In addition to the purchase of industrial power, the contract provides that the Company will supply power to TVA for full construction requirements at Fowler Bend Dam, to be built by TVA on the Hiwassee River. The Authority will reimburse the Company for construction power by supplying an equal amount of power transmitted from Norris Dam to Alcoa, where the Aluminum Company plant is located.

Two transmission lines will be required. A 154,000-volt line will be constructed between Norris Dam and the company's plant at Alcoa, near Maryville, Tenn. A second line will carry power from Santeetlah Dam owned by the Aluminum Company to Fowler Bend damsite. Both lines

COMPLAINANTS' EXHIBIT No. 852 (Excluded)

[fol. 3742] are to be constructed by TVA, and each will be about 35 miles in length.

The contract calls for the purchase by the Aluminum Company of Norris Dam power in blocks not to exceed 20,000 kilowatts demand. Terms of the agreement dispose of a class of power which municipalities and other public agencies could not use, it was explained, since it will be available only after all other requirements have been met.

The contract describes this class of power as the Authority's "Surplus over navigation and flood control requirements and other loads and commitments."

The rate for power purchased by the Company is the regular TVA rate for transmitted secondary power.

June 1, 1937, is given as the date for initial power delivery to the Company. The contract will be in force for a period of four to six years, depending upon the construction time for Fowler Bend Dam. January 1, 1937, is given as the date for initial delivery of power to the Authority at Fowler Bend.

[fol. 3743] COMPLAINANTS' EXHIBIT No. 853 (Excluded)

TVA Press Release of August 7, 1936

David E. Lilienthal, director of the Tennessee Valley Authority, has been called to Washington to attend a meeting on August 12, of the Executive Committee of the American National Committee of the Third World Power Conference, of which he is a member. The World Power Conferences, which will bring to the United States engineers of importance from many countries, will meet in Washington September 7-12.

Concurrently will be held the Second Congress of the International Commission on Large Dams of the World Power Conference.

The purpose of the Conference, generally, is to consider how the sources of heat and power may be adjusted nationally and internationally. Harold L. Ickes, Secretary of the Interior, is chairman of the American National Committee.

While in the United States, the distinguished engineers will take advantage of an opportunity to study American dams and utility systems. Four separate groups are sched-

COMPLAINANTS' EXHIBIT No. 853 (Excluded)

uled to visit the Tennessee Valley to study work of the Tennessee Valley Authority. The first group will make its [fol. 3744] visit on September 2, 3, 4; the second on September 14, 15, 16; the third on September 21, 22, 23; the final one early in October, probably on October 3, 4, 5.

Three tours have been planned for the visitors in the Valley. One will take them to Norris Dam and the town of Norris; another will show them the construction activities at the Chickamauga Dam, near Chattanooga; the final one will be to the Muscle Shoals area, for a study of Wilson Dam and the TVA Fertilizer works.

[fol. 3745] COMPLAINANTS' EXHIBIT No. 854 (Excluded)**TVA Press Release of August 19, 1936**

The Tennessee Valley Authority today announced the execution of an electric power contract with the Volunteer Portland Cement Company of Knoxville, Tennessee. Date of initial delivery of power is fixed at April 15, 1937.

The contract provides for purchase by the company of a maximum of 3000 KW. "firm or continuous power," for a period of ten (10) years. The Authority will deliver power at the Company's plant, situated in Knox County, near Knoxville, over a transmission line to be constructed by the Authority from Norris Dam.

[fol. 3746] COMPLAINANTS' EXHIBIT No. 855 (Excluded)**TVA Press Release of August 28, 1936**

Cullman, Ala.—In cooperation with local electric appliance dealers, the Cullman County Electric Membership Corporation will sponsor a three day Electric Fair in this city beginning September 17th.

The fair will feature dealers' displays of equipment showing the many uses of electricity on the farm, both in the home and for general farm use, such as pumping water, grinding feed, heating hot beds, etc.

Cooking schools will be held during the fair, at which prizes, donated by the dealers, will be awarded. Prelim-

COMPLAINANTS' EXHIBIT No. 855 (Excluded)

inary to the fair, the corporation will hold a series of cooking schools in each of the fifteen rural communities in Cullman County, in which its network extends.

The Corporation's system of approximately 133 miles of rural electrification lines, built in conjunction with the Rural Electrification Administration and the Tennessee Valley Authority, is rapidly nearing completion, and a part of the network is already in operation. Approximately 690 [fol. 3747] farmers and consumers living in small villages have contracted with the corporation for power service. The farm communities which the corporation will serve include Fairview, Welts, Berlin, West Point, Guthrie Store, Longview, Headrick, Ebenezer, Simco, Baileyton, Crane Hill, Logan, Cataco, Jones Chapel, and Trimble. The corporation buys its power from the Tennessee Valley Authority and distributes it to consumers at TVA resale rates.

[fol. 3748] COMPLAINANTS' EXHIBIT No. 856 (Excluded)

TVA Press Release of September 19, 1936

The Tennessee Valley Authority has authorized a rural electrification project in four Mississippi counties—Clay, Oktibbeha, Noxubee and Lowndes—it was announced today. Points to be served will include the Mississippi State College at Starkville.

Approximately 200 miles of rural lines will be needed to serve 800 farms in the four counties. At the present time these farms do not have electric service.

The project will be submitted to the Rural Electrification Administration at Washington for approval of a loan to finance construction. Power is to be supplied from a 44,000 volt line connecting with the TVA substation at Okolona, Miss.

Sent for release to Saturday morning Papers, September 19, 1936.

Sent to: Roy Hutchins, Associated Press.

United Press.

Knoxville Journal, City Editor.

Johnny Moutoux, News-Sentinel.

Also wire sent to Hugh Warner, TVA, Tupelo.

[fol. 3749] COMPLAINANTS' EXHIBIT No. 857 (Excluded)

TVA Press Release of October 1, 1936

Power from the second generator at Norris Dam was turned into the Tennessee Valley Authority's 220-mile Norris-Wilson Dam transmission line Wednesday at about 2 p. m., C. L. Karr, head of the Division of Power Operations, announced today.

The two generators, first of which went into operation about August 6, were adding 46,000 kilowatts to the 110,000 generated by the six out of eight generators in operation at Wilson Dam, making a total of 156,000 kilowatts.

All available water was being used, the operations department reported, none being spilled through the sluiceways at either dam. The water level at Norris Dam was approximately at the point dictated for the date by the rule curve for operation of the dam.

October 1, 1936.

[fol. 3750] COMPLAINANTS' EXHIBIT No. 858 (Excluded)

TVA Press Release of October 12, 1936

The Tennessee Valley Authority announced today that the City of Athens, Alabama, the first city in Alabama to contract for TVA power, has also become the first to sponsor a county-wide rural network to bring TVA power to the surrounding farm areas.

Arrangements have just been completed, the announcement states, whereby Athens will acquire from TVA all of the Authority's rural lines in Limestone County, and, in addition, construct some 65 miles of new lines with funds borrowed from the Rural Electrification Administration. The result will be a combined rural system radiating out of Athens and serving a total of 649 farm customers on 135 miles of line.

Transfer of the TVA lines to Athens will be made on October 31, and arrangements for construction of the new REA lines will be undertaken immediately. The rural customers will receive power at the standard TVA resale rates, plus an amortization fee of 1 cent per kilowatt hour up to the first 100 kilowatt hours per month, which will be used to retire the cost of the lines.

COMPLAINANTS' EXHIBIT No. 858 (Excluded)

The City of Athens first began to receive TVA power for its municipal electric system on June 1, 1934, and since that time its electrical development under TVA rates has [fol. 3751] attracted nation-wide interest. Between June, 1934, and September, 1936, consumption of electricity doubled, and average home use increased threefold, from 51 kwh. to 151 kwh. On September 1, 1936, 78% of the city's customers had electric refrigerators, 35 per cent electric ranges, and 14 per cent electric water heaters.

During the period of TVA power service, the number of customers increased from 692 to 1,032. Addition of the rural system will bring the total to nearly 1,700.

The plan for extension of rural lines by municipal electric systems has been put into practice by a number of cities distributing TVA power. Within the past year, extensive rural systems were constructed by the cities of Dayton and Pulaski, Tennessee, and New Albany, Mississippi. An REA grant for 70-mile rural network has recently been received by the city of Holly Springs, Mississippi, and the cities of Bolivar, Milan, and Somerville, Tennessee, are all proceeding with surveys for rural lines radiating out of their municipal systems.

In a message to Mayor R. H. Richardson, Jr., of Athens, [fol. 3752] David E. Lilienthal, Director of the TVA congratulated the city on its action and stated:

"The program adopted by your city administration is one which should be of genuine value both to the city and the surrounding area. Our experience has shown that the greatest benefits of electric service may be obtained when town and country unite in a plan of economical distribution. The city of Athens has already demonstrated its leadership in electrical development within the city limits and we are glad now to see the city take the lead in a far-reaching program of rural electrification."

[fol. 3753] COMPLAINANTS' EXHIBIT No. 859 (Excluded)

TVA Press Release of October 17, 1936

Talk Before the Public Ownership League of America,
Springfield, Illinois, October 16, 1936, by William I.
Nichols, Director Division of Electrical Development

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COMPLAINANTS' EXHIBIT No. 859 (Excluded)

I can testify to you here tonight that this is the spirit in which the TVA is being administered—that this is the point of view of the hundreds of engineers and chemists and foresters and all the rest who are now gathered together in the Tennessee Valley from every state in the Union. They regard their program as a testing ground for the nation and their work is dedicated to the service of all the people. If by experiment in the Tennessee Valley it is possible to develop a set of simplified promotional electric rates, then it is to be expected that these rates will be applied elsewhere—and this has, in fact, been done with savings of tens of millions of dollars to consumers in all parts of the country. If by experiment in the Valley it is possible to develop improved and simplified standards for rural line construction, it is possible for them then to be adopted in other areas—and this also has been done, speeding forward the [fol. 3754] national movement for rural electrification. If by experiment in the Valley, it is possible to develop an improved phosphate concentrate, and better crop management, to save and enrich the soil, then these things also can be adopted elsewhere. Even where the TVA has made mistakes—and like every agency, public or private it has made mistakes—even then the country profits, in a sense, for this experience may eliminate similar and perhaps more costly mistakes elsewhere.

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Clearly the execution of such a program for an entire region—affecting portions of seven states, 40,000 square miles, and over two and one-half million inhabitants—is an enormous job and a complex job. Today, after little more than three years the Authority is employing over fifteen thousand men and women. In addition to Wilson Dam, it has completed two other great dams, Wheeler Dam and Norris Dam, and is operating an extensive transmission system. Four additional dams are under construction. One of the nitrate plants is now engaged in the experimental production [fol. 3755] of fertilizer for testing on demonstration farms, but not for sale. The work of reforestation, soil erosion control and rural electrification is moving forward over a wide front.

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COMPLAINANTS' EXHIBIT No. 859 (Excluded)

Out of these two has come also the third idea, which is this—that in the development of water control, water power, belonging to the people should be enlisted and marshalled in the service of the people.

[fol. 3756] COMPLAINANTS' EXHIBIT No. 860 (Excluded)

TVA Press Release of November 16, 1936

The TVA And Cities, by Arthur E. Morgan, Before Annual Meeting of United States Conference of Mayors, Mayflower Hotel, Washington, D. C., November 16, 1936

There is a steadily growing movement toward public ownership of electric power distribution. In the past 30 years the private power industry has organized large areas into integrated systems. As compared with having each small town or city operate a separate power distribution service, this organization of large distribution systems has great economies. Even if a dependable source of power is insured, it is not economical for each municipality to maintain its own research and mechanical staff, its own experts and its own adequate managing personnel. In the transition from private to public ownership of power distribution it is very important that the operating economies of the private industries shall not be lost. It is important that areas taken over from private to public ownership shall be of such size and of such characteristics that economy of organization and operation can be preserved. This will [fol. 3757] mean that single cities and towns, especially those of moderate size, cannot economically act alone. Efficient distribution areas should be organized, which commonly may include several cities and towns, and considerable rural area. For electrical distribution a city is not as a rule a normal unit.

Electric power distribution by public ownership must be seen as a regional rather than as a municipal matter.

COMPLAINANTS' EXHIBIT No. 860 (Excluded)

A system of large dams will create a very large supply of power. Such a power system is a complicated technical development, yet for the farmer who is relieved from pumping water for his stock, for the housewife who can wash and cook and sweep and preserve her food electrically, it means a great lessening of burdens and a simplification of living. As part of a multi-purpose development, power can be secured more cheaply than if the construction should serve power alone.

The unified control of the Tennessee River is the greatest project of its kind the modern world has known. It requires the storing of vast volumes of water during flood seasons, and the planned use of that storage during low water periods. It demands complex adjustments between up-river and down-river power plants, between navigation, flood control and power.

[fol. 3759] COMPLAINANTS' EXHIBIT No. 861 (Excluded)

TVA Press Release of March 23, 1937

An Economic Plan Versus Economic Planning in the TVA

Address by Dr. Arthur E. Morgan at the Annual Conference of Schoolmen's Week at the University of Minnesota, Tuesday, March 23 at 9:45 A. M.

Then, also, the Tennessee River has large possibilities for hydroelectric power. It is not only desirable but necessary to combine power development with flood control and navigation. The damsites which are most suitable for power development also are necessary and the only good ones available for navigation and flood control. It is cheaper to secure those three objects together than to work them out separately.

Even considered as a power project alone the unified control of the Tennessee River transcends private initiative. If different private companies should build independent projects on different parts of the river system there would be a lack of that integration which makes for the most economical power development.

COMPLAINANTS' EXHIBIT No. 861 (Excluded)

The Wilson Dam at Muscle Shoals on the Tennessee River [fol. 3760] is a "run of the river" plant. That is, there is very little storage above the dam, only enough to regulate the river for a day at a time. The flow of the Tennessee River varies greatly between high and low water. In high water periods there is enough water supply to generate more than half a million kilowatts of electric energy. During very dry seasons less than a tenth as much power can be developed. Now, as most of you know, it is only continuous power, or prime power as it is called, which has a high market value. Power which is available for only six or eight months in the year is worth but a fraction as much. Because the continuous power it will supply is so small, the Wilson Dam taken by itself is not highly profitable as a power development.

Hundreds of miles upstream on the Clinch River, a branch of the Tennessee, the TVA has built the Norris Dam and power plant, which is of a very different character. This dam forms one of the world's largest reservoirs, which will store almost a year's flow of the river above. During the winter and spring, when there is enough or too much water in the river below, the Norris Dam is closed and the water [fol. 3761] stored. Then during the dry season it is used to make power when power is most valuable, and when the Wilson Dam has the lowest supply. But that is not all. The water which passes through the Norris Dam power plants flows down river to Wilson Dam and about doubles the low water supply there. There are eight present and prospective dams in the TVA program on the Tennessee River below the Norris Dam, and the water released from the Norris Dam in very low water will about double the power at each of the dams below. The Norris Dam taken by itself would not be a highly profitable power development, but when we consider how it can be regulated to about double the prime power supply at eight other dams downstream, we can see the value of a single integrated power system for the entire river.

There are other benefits of an integrated system. For instance, the Chickamauga Dam, now being built by the TVA on the Tennessee River, is primarily for navigation, but will develop power as well. It differs from Wilson Dam below in that it has a relatively low head, about 50

COMPLAINANTS' EXHIBIT No. 861 (Excluded)

feet at ordinary river stages. In flood season it is almost drowned out and will produce no power, while in very [fol. 3762] dry seasons it also could by itself produce little power. Wilson Dam below is a high dam. Not only is its power not reduced during floods, but those floods supply water for a very large increase in the amount of power which can be generated. Therefore, in high water seasons when the Chickamauga Dam is drowned out and can supply no power, the Wilson Dam has an abundant supply, while in very low water when Chickamauga Dam would have little power, the Norris Dam will turn down water and double its power output. Thus these three dams which taken separately would not be highly profitable investments for power, when they are operated together as a single system, will develop more than twice as much prime power as the sum of the three operated separately. That is only the simple beginning of a great system of interrelated dams on the Tennessee River and its tributaries. Taken all together and owned and operated as a single system, a great variety of economies can be secured, and the combined value is far greater than though the different units should be owned and operated separately.

[fol. 3763] COMPLAINANTS' EXHIBIT No. 862 (Excluded)

TVA Press Release of November 28, 1935

Tennessee Valley Authority, Knoxville, Tennessee

The Tennessee Valley Authority today made public a statement of David E. Lilienthal, Director in charge of electricity operations, addressed to E. O. McLean, Chairman of the Bedford County (Tennessee) Rural Electrification Committee, in answer to the following telegram from Mr. McLean:

"THE FARMERS OF BEDFORD COUNTY HAVE PUT FORTH MUCH EFFORT TO ORGANIZE AND BUILD A COOPERATIVE RURAL DISTRIBUTION SYSTEM AND PURCHASE POWER FROM THE TVA STOP MANY OF US ARE FEARFUL THAT THE BUILDING OF SPITE LINES BY THE TENNESSEE ELECTRIC POWER COMPANY MAY CAUSE THE

COMPLAINANTS' EXHIBIT No. 862 (Excluded)

TVA TO ABANDON OR WITHDRAW THEIR COOPERATION WITH THE BEDFORD COUNTY PROJECT STOP PLEASE ADVISE US THE AUTHORITIES ATTITUDE IN THIS MATTER."

E. O. McLean, Chairman Rural Electrification Committee.

[fol. 3764] Mr. Lilienthal's answer follows:

I have your telegram requesting a statement of the Authority's position and policy in its rural electrification program. Let me emphatically assure you, on behalf of the Tennessee Valley Authority, that any commitments we have made as to cooperation in the farm electrification program you and your neighbors have set up will be carried out in every detail. The directors of the Authority and our staff in the field who have been working with farmer organizations have recognized that within the past few weeks there has arisen a situation which threatens to destroy the farmers' plans and projects, to which you and your neighbors of Tennessee and Alabama have given so much in time and energy.

You recognize, as we have recognized, that the construction of what you term "spite lines" may destroy your own organizations for county-wide programs of farm electrification. Let me say to you and to every other farmers' organization similarly situated that the Tennessee Valley Authority, as an agency of the United States Government, will stand by you and your neighbors to the limit, to protect your farmers' organizations from destruction by unfair tactics.

Congress, in creating the Tennessee Valley Authority, [fol. 3765] clearly defined the manner in which the Authority was to make use of the surplus electric power produced as a by-product at its navigation and flood control dams in the Tennessee River basin. To carry out this mandate of Congress and of the Administration, the Authority is required to give preference to state, counties, municipalities and to cooperative associations and non-profit organizations formed by people in rural areas.

The very nature of the Authority's entire program makes it of first importance that this surplus electricity be made available to all. In carrying out this policy in actual prac-

COMPLAINANTS' EXHIBIT No. 862 (Excluded)

tice, special consideration has been given to the needs of rural areas. This policy and practice have been accepted with overwhelming approval by both town and country everywhere electricity has been made available. And as a result of this emphasis in the Authority's program, the whole question of rural electrification in the Valley has received remarkable stimulus. In those sections where TVA service is an immediate possibility, or where availability of power is likely in the near future, farm and town groups have organized themselves into associations and cooperatives to carry out their part of the electrification program. [fol. 3766] These groups have undertaken to survey their own lines, to perfect their own organizations, and to initiate negotiations with the Authority for electricity.

This movement has been participated in by the state legislatures, by the creation of state Rural Electrification Administrations, by the cooperation of Farm Bureaus, county courts, county agents and other agricultural agencies of the Valley.

TVA, as a public agency, has been requested to cooperate with these self-organized farm groups in rural electrification plans. In this work the Authority has maintained its policy of avoiding any duplication of service or any paralleling of existing lines. On this working basis the Authority has entered many rural areas and is now serving with electricity cooperative or town and country organizations in both Tennessee and Mississippi. In no instance heretofore has the Authority or a cooperative association constructed lines except to serve customers not previously served by any power company.

The urgency and necessity for determined steps toward rural electrification is apparent. Only a beginning has been made. We have just scratched the surface on this job. What you and your neighbors throughout the Valley are doing has grown out of the determination of the people [fol. 3767] of the Valley to obtain for this area the benefits of cheap electricity. It is a movement which has come from the people themselves, working through their own organizations.

Before the farmers' organizations and TVA started action to get power to farmers who have been denied it all these years, the private power companies had taken little

COMPLAINANTS' EXHIBIT No. 862 (Excluded)

or no interest in these unserved rural areas. This orderly and successful drive for farm electrification is now threatened by certain hastily undertaken activities of a small number of private power companies. Perhaps this can be best illustrated by relating what has happened and what is happening in Dayton and in Rhea County in Tennessee.

The City of Dayton signed a power contract with the Authority September 12, 1934, and service was supplied beginning February 1, 1935. As a result of this contract there was an immediate interest in the possibility of line extensions from Dayton to adjacent rural areas in Rhea County. During the latter part of March a mass meeting of the farmers was held in Dayton at which time the City and the Authority were requested by the farmers to undertake rural service in Rhea County. On Monday, April 1, 1935, the Rhea County Squires met and prepared a resolution which [fol. 3768] formally expressed the desire of the rural residents relative to obtaining rural electrification and cooperating with the Authority to this end. Preliminary surveys were begun with a view of working up a rural electrification project for the county and these were presented to the Rural Electrification Administration with a formal letter of application on May 31, 1935. Due to the enthusiasm in the County it was found necessary to enlarge the scope of the electrification and a new survey was made. This was presented to the REA on October 2, 1935, with a request for additional funds. On October 17, 1935, news releases stated that the REA had tentatively approved the loan to the City of Dayton. On October 30, 1935, approximately thirteen days after the announcement of the loan and six days before the final approval that REA money was available, certain Tennessee Electric Power Company crews entered Rhea County and began construction along routes which had been previously surveyed for the rural electrification project of Dayton.

The Authority is now constructing for Dayton the lines originally laid out in the rural electrification project for Rhea County. If the Power Company pursues its present practice, there therefore will result a certain amount of [fol. 3769] line duplication in this County. The Authority is not going to break faith with the farmers with whom commitments for this service had been made. The Author-

COMPLAINANTS' EXHIBIT No. 862 (Excluded)

ity's policy against duplication of facilities cannot be used to defeat the plans of the farmers' themselves who were unserved when their plans were made.

One of the fundamental principles of the Authority's policy in rural electrification is that lines be built and operated on a sound business basis. Sound public policy requires that lines shall include those closely-built sections which are profitable, as well as those more scattered sections where revenues are lower and costs per farmer somewhat higher. If the profitable sections of the area are taken away from the farmers' association by the private power companies the farmers in the rest of the area are left out in the cold and the whole object of widespread electrification defeated. If the power company had been able to take short pieces of these Rhea County lines, many miles would have been left without service and with no possibility of service in the future. Perhaps this is why you have called these power company over-night lines "spite lines."

What has been happening in Rhea County is not an isolated instance. It is cited in detail merely to point out the issues involved. Similar occurrences have taken place and are taking place in many parts of the Valley.

In general, there are three circumstances which should be given particular attention at this time.

First, is the long period of neglect of rural electrification by private power companies. It is only recently that companies in this region have taken any genuine interest in the field of general or widespread farm electrification. Their efforts have been restricted almost entirely to the construction of certain profitable lines near large load centers or concentrated areas of population. Even in this restricted program of rural line construction, the customers themselves were forced to pay a heavy price as their share in this construction.

Second, is the strange coincidence that the power companies are interested almost exclusively in these rural areas where TVA power is immediately or imminently available. A general rural electrification program of private power companies is, of course, to be applauded. But the present activities are not general and the program could hardly be

COMPLAINANTS' EXHIBIT No. 862 (Excluded)

called one of widespread rural electrification. It seems a [fol. 3771] remarkable accident that the greatest activity of the private power companies has been in sections where some steps toward obtaining TVA power had been taken, and that this action in many instances has resulted in the construction of power company lines along exactly the same routes as laid out by cooperative farmer organizations to be supplied with power from the Tennessee River dams.

Third, is the fact that the power companies appear to be undertaking, not a general rural electrification program, but what will, in many places, amount virtually to a blocking of general rural electrification. This has been pointed out in the Rhea County instance. It is true elsewhere. The construction of a few miles of rural line, and the serving of a few farms at strategic points, can wreck the chances for ever having a soundly operated system of rural lines serving both sparsely and thickly populated sections throughout a county or area.

In viewing the whole question of rural electrification, it should be borne in mind that this problem reaches across the entire Tennessee Valley—across, indeed, the entire South. There is more rural electrification to be done in this territory than any one agency, any one company or a [fol. 3772] group of companies can do this year, or in the next three or four years. The field for rural electrification is almost unlimited. To get the job properly done will tax the abilities and capacities of every party concerned.

It is inescapable in the very nature of the situation that there will be farm electrification by cooperative groups, by municipally owned electric systems, by county associations and by private power companies.

Electricity is coming to the farms of the Tennessee Valley. Its coming is as inevitable as the coming of the day when the menace of destructive floods in the Valley will be a fear of the past. But this electrification of Valley farms, the bringing of electricity to rural communities, can be obstructed, can be made costly in labor and in money, can be delayed beyond all need for delay unless the farmers, the towns, the private companies and the public agencies find some just and reasonable basis for harmonious cooperation.

COMPLAINANTS' EXHIBIT No. 862 (Excluded)

In conclusion, in reply to your direct inquiry let me say this to the farmers of Bedford County and other counties where farmers have organized their own cooperative electric system: TVA has no intention of abandoning or with- [fol. 3773] drawing their cooperation with these projects. Furthermore, the Tennessee Valley Authority will stand shoulder to shoulder with the farmers' organizations in their efforts to secure electricity for the largest possible number of farmers.

Thank you for wiring me, and be assured that we are all deeply interested in the work you are doing.

David E. Lilienthal.

[fol. 3774] COMPLAINANTS' EXHIBIT No. 863 (Excluded)

TVA Press Release of May 30, 1934

Address of Dr. Arthur E. Morgan, Delivered Before the
Central States Forestry Congress May 30, 1934

President Roosevelt was determined that the hydroelectric project at Muscle Shoals reach fruition; that it should be supported by additional developments. He was interested that the fertilizer project should go ahead, but all that might have been carried through as the sole purpose and intent of the legislation. The President, however, did not rest there. In his message to Congress forecasting the bill for the Tennessee Valley Authority, he said that the great development at Muscle Shoals was only a minor part, that he looked forward to a project for bringing industrial and social order out of the haphazard growth that had characterized our national life and that he hoped this region might be a case in which methods and policies might develop, with the prospect that if they should develop soundly and successfully here, these same policies might have wider application in other parts of the country.

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[fol. 3775] The Tennessee Valley Authority Act defines two or three very specific purposes and gives quite definite instructions for their fulfillment. One of these is the dis-

COMPLAINANTS' EXHIBIT No. 863 (Excluded)

tribution and sale of electric power. It is the opinion of President Roosevelt, I believe, that it probably would not be wise for the public to generate all the power in the United States. Within the last two years he has expressed himself to that effect. He believes, however, that the public utility business, so far as power is concerned, has not always been wisely handled; that there has been mismanagement; that there has been over-capitalization; that there has been undue political influence. There have been a good many methods that ought to be eliminated from large-scale industries in the United States. He has suggested that there be set up what he called a "yardstick" for power, an example of public ownership in generation, transmission, and distribution, where all the factors could be in evidence, where there could be complete and unquestionable fair analysis and records so that the public might discover, perchance, what is actually the necessary cost of power, and whether the public in reality can handle projects as effectively as private industry.

The Tennessee Valley Authority has made contracts for supplying a number of communities with electric current. Only one such contract is in actual operation as yet. One or two more will be in operation within a month, and about a dozen more contracts have been made which will go into operation as soon as legal processes can be completed. It was the attitude of the President, and it is the attitude of the Board of Directors of the Tennessee Valley Authority, that existing investments in electric power utilities should not be unnecessarily disturbed; that existing values should be recognized. And so it has been the policy of the Tennessee Valley Authority in acquiring an area in which to use this "yardstick", so far as possible, to come to amicable settlement with those who at present occupy the area.

We have, up to date, purchased considerable area and considerable plant and equipment from one of the large power organizations of the country. We are now distributing that power. The one municipality which so far has been using Tennessee Valley Authority power is the City of Tupelo, Mississippi. We have established rates there that are somewhat less than half of the rates formerly paid.

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COMPLAINANTS' EXHIBIT No. 863 (Excluded)

[fol. 3777] I am going to make one other observation with reference to power. The same law which proposed the generation and sale of power at Muscle Shoals by the Government, authorized the construction of the Cove Creek or Norris Dam on the Clinch River. Some of you visited that yesterday. The Wilson Dam power plant at Muscle Shoals taken by itself alone is not a profitable investment. It is not profitable alone for the reason that there is very little storage in the river above, and while in high water there is a very great supply of power, when the river is low that power drops off. Last summer it dropped down to less than 35,000 kw. capacity for the entire plant. In our wet winters it goes up to more than 500,000, a range of 1 to 24. Now you all know the value of power is the value of what we call "Prime Power", or that which is dependable. The power that is available for only part of the year has relatively little value, and for that reason the Muscle Shoals plant, taken by itself, is not a profitable investment.

On the Clinch River at Norris Dam we have another power project of a very different sort. There we have one of the greatest storage reservoirs in the world coming into being [fol. 3778] with a storage capacity of 3,000,000 acre feet. We can store the average year's flow of the river above that power plant, a drainage area of 2,000 or 3,000 square miles. But the Norris Dam power plant taken by itself would not be profitable. It cost about \$250 per installed horsepower, and that is too much to pay for power. Neither one of these plants taken alone is a good investment, but taking the two together you have a very different situation. At Muscle Shoals the power available drops down very low for, say, three months in the year. After eight or nine months of relatively high water, we may have a dry spell in August, September, October,—when the river so nearly runs dry. With Norris Dam constructed it will be possible to store up water in Norris Reservoir throughout most of the year, then when the river below is very low, to generate power at Norris Dam at the time power is most needed. When that water has passed by Norris Dam, it will flow down to Wilson Dam at Muscle Shoals and go through that power plant also. We may use the entire year's flow of the river, possibly, in two or three months by letting it out just when needed. In that

COMPLAINANTS' EXHIBIT No. 863 (Excluded)

way we can raise the prime or dependable power at Muscle [fol. 3779] Shoals from say 25,000 or 35,000 kw. to 150,000 or 200,000 kw. This represents the value Norris Dam can add to Muscle Shoals. Not only to Muscle Shoals, but the same is true with every plant down the river below Norris Dam. There is room down the river for about eight power plants.

That same necessity for coordinating development extends throughout the Tennessee River system. Ultimately, it will be possible to develop four million hp. from the Tennessee River system. Possibly half of that will be along the main river; possibly the other half will be on the headwaters; but the reason such a large amount can be developed is that we can develop the headwaters and lower plants as one unit. By doing that, we can possibly cut in two the cost of producing hydroelectric power. And so we hold that the development of the water power of the Tennessee River ought to be a single integrated project and not a series of unrelated projects.

The Norris Dam is being built for power development, but that is not an end in itself. We do not develop power just so that there can be power development. We develop power to contribute to the well-being of the people in this [fol. 3780] region. It is only a means to an end. The object of building a dam is to provide power; the object of providing power is to raise economic and social conditions of a region.

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It would please me very much to see industry growing up here, owned at home. We see public utilities with ownership a thousand miles away. We see the employees here getting their monthly salaries; we see the users of these utilities getting their monthly bills; and all the cream of profits goes hundreds of miles away. It seems to me that the absentee ownership investment ought to be getting a decent rate of interest and fair compensation so far as management is concerned, but otherwise the fruits of production ought to be staying in their own region, and there ought not to be a bleeding of one region to keep another, as has been the situation here.

[fol. 3781] COMPLAINANTS' EXHIBIT No. 864 (Excluded)

TVA Press Release of June 1, —

The Tennessee Valley Authority Friday paid to the Mississippi Power Company the sum of \$850,743 for the acquisition of the company's properties in nine counties in Mississippi. The counties are: Pontotoc, Lee, Itawamba, Union, Bonton, Tippah, Prentiss, Tishomingo and Alcorn.

The properties acquired by the Authority are those which have been under option since January. In the intervening weeks examination of titles and other legal work necessary has been carried on under the direction of J. C. Swidler, TVA power attorney, assisted by W. G. Roberds, attorney of West Point.

Assuming the ownership of the facilities in the nine counties conforms with the policy of the directors of the Authority, as announced by David E. Lilienthal, director in charge of power.

"The Authority is under duty to acquire a market for its power," he said. "It is authorized to compete with existing utilities, and for this purpose is expressly empowered to erect duplicate facilities. But no competing facilities have been constructed, and I am authorized to say that under the present Board none will be constructed, until every reasonable alternative has been exhausted."

Mr. Lilienthal said that the Authority will use the acquired facilities at the earliest possible moment.

[fol. 3782] COMPLAINANTS' EXHIBIT No. 865 (Excluded)

TVA Press Release of June 3, 1934

Residents of Corinth and Alcorn County, Mississippi, will receive an electric rate reduction averaging approximately 40 per cent and be enabled to acquire a debt-free electric distribution system in from eight to ten years under terms of a contract announced today between the Tennessee Valley Authority and the Alcorn County Electric Power Association.

Effective immediately, the contract places the Alcorn County Electric Power Association in business with a system purchased for \$114,632.60, serving the entire county,

COMPLAINANTS' EXHIBIT No. 865 (Excluded)

including the city of Corinth. There is a provision for construction of new rural electrification lines by the Tennessee Valley Authority up to 100 miles of lines. These may be taken over by the Association in the same manner as the present property is being acquired, at a total cost not to exceed \$125,000. The power association is a non-profit corporation, incorporated under Mississippi laws.

Rates charged for city residential and rural service will be the same. They will equal rates now in effect at Tupelo, Miss. Installment payment made by members will pay for purchase of the system.

[fol. 3783] The property transferred to the association is a part of the city and rural lines acquired by the Tennessee Valley Authority from the Mississippi Power Co., privately owned utility which previously served this territory.

"This contract is a remarkable demonstration of cooperation between townspeople and farmers in Alcorn County," David E. Lilienthal, Tennessee Valley Authority director in charge of power, said today in announcing the contract. "It is concrete evidence of the mutual interests of town and county."

The association will receive power from the Tennessee Valley Authority, delivery being made at the Corinth substation.

As explained by Mr. Lilienthal, the Alcorn County plan will function as follows:

Purchase of the electric distribution system in Corinth and the county will be made by the Alcorn County Electric Power Association. All residents of the county are eligible to membership.

The association will pay city, county, state and federal taxes the same as any other private corporation. Purchase will be made without issuance of bonds.

[fol. 3784] Members of the association will pay installments according to benefits received from the Association—approximately according to the amount of electricity used by the member each month. These payments will be used for the sole purpose of clearing the system of all debt.

The association will sell memberships at \$100, payable either \$80 in cash, or \$10 down, plus one cent per kilowatt hour for each kilowatt hour up to 100 kwh. a month, with a minimum monthly membership charge of 25 cents.

COMPLAINANTS' EXHIBIT No. 865 (Excluded)

Under this schedule, the user of 25 kilowatt hours in a month would pay a minimum bill of 75 cents, as at Tupelo, plus 25 cents membership installment. A user of 50 kwh. would pay \$1.50 for current and a 50 cent installment.

For 100 kwh., the member would pay \$2.50 for current and a \$1 installment. Users of 200 kwh. would pay \$4.50 for electricity and a \$1.00 installment.

These membership payments are turned over by the association to the Tennessee Valley Authority in payment for the system.

"The residents of Corinth and Alcorn County recognize [fol. 3785] the importance of owning their own plant," Mr. Lilienthal said. "They further recognize the advantages of making the system pay itself out of debt so that debt charges will not be paid indefinitely.

"While the Tennessee Valley Authority is wiping out the debt charges on its Muscle Shoals properties, these people will be doing the same thing with their distribution system.

"The plan might be described in this manner:

"Everybody in Alcorn County pays the Tupelo rate—that's the rent on the house. But the people want to own the house, so all of them are going to chip in and wipe out the mortgage. In spite of low rates, the system will soon be paid for, and then the only expense will be bare cost of wholesale power, operation and repair.

"Each member will pay installments approximately according to the benefits in electricity he received. Under the present rates a surplus will be created. At the end of the purchase period, the installments will no longer be necessary and the surplus can be used in reducing rates further and members can begin paying themselves back the member-[fol. 3786] ship capital they have invested."

The contract pledges that the Authority "will, by every means within its power, seek to further the economic welfare" of Alcorn County "by fostering and promoting the increased use of electricity.

Management of the association will be in the hands of members, with supervision by the Authority.

Present electric customers who do not choose to join the association may continue to be served at the old Mississippi Power Co., rates.

COMPLAINANTS' EXHIBIT No. 865 (Excluded)

Revenues of the association must be distributed as follows:

First, to pay all operating costs, including taxes and maintenance.

Second, to establish a reasonable reserve for new construction and other contingencies.

Third, to clear the system of all debt, thus eliminating cost of debt.

Fourth, after indebtedness is wiped out, membership installments are to be reduced or eliminated.

Fifth, after these fees are eliminated, surplus earnings are to be devoted to further rate reductions and to repay members their original membership investment.

[fol. 3787] The following table shows a comparison between present rates and rates under the Alcorn Power Association plan using TVA power:

No. of kwh.	Cost at Alcorn Membership Rates	Cost at Present Corinth Rates	Savings
Consumed			
25	\$1.00	1.85	\$.85
30	1.20	2.40	1.20
40	1.60	2.68	1.08
50	2.00	3.50	1.50
60	2.30	3.80	1.50
70	2.60	4.10	1.50
80	2.90	4.40	1.50
90	3.20	4.70	1.50
100	3.50	5.00	1.50
150	4.50	6.50	2.00
200	5.50	8.00	2.50
290	6.40	10.25	3.85

Savings for users in the rural sections will be substantially greater than those in Corinth.

Signing of the contract between the power association and the Tennessee Valley Authority followed acquisition by the TVA of the facilities of the Mississippi Power Co. in nine northeastern Mississippi counties on June 1, for the sum of \$850,743.00.

[fol. 3788] COMPLAINANTS' EXHIBIT No. 866 (Excluded)

TVA Press Release of June 12, 1934

Washington, June 12.—Combining electric range and refrigerator, a new kitchen unit designed for the TVA electrification program was accepted this afternoon by Director David E. Lilienthal at the Bureau of Home Economics laboratory, after formal inspection in which he was joined by representative Government officials, electrical manufacturers and dealers, and others interested.

Dual labor-saving services are contained in a compact space-saving unit which may be readily installed in the home. This latest product of the General Electric Company is made particularly for Electric Home and Farm Authority financing of consumer-purchase in parts of Alabama, Georgia, Tennessee and Mississippi where power rates are sufficiently low to encourage the tie-up. The unit, to be handled by regular dealer outlets, will retail at \$—.

The General Electric Company is one of 24 concerns manufacturing some 50 electric ranges, refrigerators and water-heaters which have received the EHFA stamp of approval for marketing in the Tennessee Valley.

"The product typifies the spirit and the cooperation of the electric manufacturers," declared Mr. Lilienthal in accepting the pioneer model. "It is the answer to our request for cheap yet practical appliances to enable people of modest means to enjoy the advantages of electricity and at the same time utilize the energy to be created not only in the Tennessee Valley but in other parts of the country where gigantic waterpower developments are under way or projected. The combination of low cost current and appliances, we think, will open up new markets for manufacturers, and retailers, and benefit the utilities as a whole."

[fol. 3790] COMPLAINANTS' EXHIBIT No. 867 (Excluded)

TVA Press Release of June 13, 1934

Details of the Tennessee Valley Authority's efforts to protect the electric investor against the inevitable losses of competition are revealed in the attached exchange of correspondence between Director David E. Lilienthal, in charge of the TVA power program, and C. E. Groesbeck, Chairman

COMPLAINANTS' EXHIBIT No. 867 (Excluded)

of the Board of the Electric Bond and Share Company, of New York.

Knoxville, Tennessee, May 28, 1934.

Mr. C. E. Groesbeck, Tennessee Public Service Company, [fol. 3791] 2 Rector Street, New York, New York.

DEAR MR. GROESBECK:

On November 25, 1933, the people of Knoxville voted to acquire or construct an electric distribution system. Thereafter the City entered into a contract with the Tennessee Valley Authority for the purchase of power at wholesale to supply such a distribution system. On March 3, 1934, representatives of the City of Knoxville offered to buy the distribution facilities of the Tennessee Public Service Company within the City of Knoxville. That offer was rejected by you. You pointed out that the Company should not be asked to sell its Knoxville properties without also selling the fringe properties and transmission lines outside Knoxville. These outside properties obviously the city could not buy.

In order to carry out the mandate of the electorate the city has proceeded with plans for the construction of an electric distribution system in Knoxville, to be supplied with power from the Tennessee Valley Authority. The plant will compete with the distribution system of the Tennessee Public Service Company in Knoxville.

Such duplication of facilities and territorial competition [fol. 3792] in the area of its operations the Tennessee Valley Authority has consistently sought to avoid wherever there was a reasonable alternative. Accordingly, the Board authorized me to indicate the Authority's willingness to purchase the electric facilities of the Tennessee Public Service Company, both inside and outside of Knoxville, such facilities to be thereafter sold back to the various municipalities in the Company's territory. These negotiations have been going on for three months, and have absorbed a large part of your time and mine. The Authority has had the assistance of our technical staff and, at the direction of the President, of an accounting investigation conducted by the Federal Trade Commission. Because the City of Knoxville is about to let contracts for the construction of the first

COMPLAINANTS' EXHIBIT No. 867 (Excluded)

section of the proposed distribution system, it is essential that the negotiations between Tennessee Valley Authority and Tennessee Public Service Company looking toward purchase be brought to a conclusion.

On behalf of the Board, I have heretofore made you certain definite proposals for the purchase of electric property of the Tennessee Public Service Company. None of these offers has been acceptable to you. This letter constitutes a [fol. 3793] final offer. In order to do everything within reason to prevent a competitive situation in Knoxville and protect bona fide investors in useful property, the Authority's offer embraces not merely the Knoxville property but also all of the Tennessee Public Service Company's electric properties which are for sale; it also provides a means of putting the Company's street railway property on an earnings basis, in lieu of a continued deficit as in the past.

The Authority hereby offers to enter into a contract with the Tennessee Public Service Company, the details and phraseology to be agreed upon later, for the purchase of all of the electric transmission and distribution property of the Company, including substation facilities and real estate appurtenant thereto, office buildings and electrical supplies and equipment, but excluding the Company's 110 KV. transmission line extending from Waterville to Kingsport. This latter line you have indicated is not for sale. The Company is to retain generating facilities and real estate in connection therewith.

The Authority will pay \$5,250,000 for the property in question, payable, at the option of the Authority, in cash upon delivery or with not less than \$1,500,000 cash and the balance payable over a period of not over five years. [fol. 3794] The Authority will pay 6% interest upon unpaid balances, but shall have the right to accelerate the payment of such balances.

As a part of the contract the Authority will agree to give its assistance in improving the revenues of the Company's local transportation system in and adjoining Knoxville, by undertaking to secure the active cooperation of the city of Knoxville in a joint program of ride-building. An increase in net income of \$12,000 per year is estimated to result from such program. It will further use its best

COMPLAINANTS' EXHIBIT No. 867 (Excluded)

efforts to induce the City to relieve the company of its present obligations to maintain and repair its track zone, with a saving to the Company estimated by your Manager of \$35,000 per year. The Council Committee on Power, the Mayor and the City Manager have already expressed their intention of supporting these measures in the event of the sale of the electric properties. Furthermore, I am advised that if the street railway property, now running a deficit of \$40,000 a year after depreciation, is written down from \$4,000,000 to \$3,000,000, that there will be an additional saving in the way of reduced taxes of about \$22,000 a year, and there will be an additional saving in depreciation expense of \$30,000 a year.

[fol. 3795] The Authority will establish an exchange point with the Company at Waterville, Tennessee, utilizing the Company's substation facilities at that point for the purpose, and will enter into an interchange agreement which will provide for mutual stand-by service at such point. The Authority will agree to transmit for the Company, at Waterville to an agreed point in Knoxville, such power as the Company may need for the operation of its transportation system, without charge for the transmission, but with a reasonable allowance for line losses. Should the Company prefer, the Authority is willing to supply its energy requirements for transportation purposes at the Authority's standard rates, representing an annual saving to the railway of about \$10,000 under present costs.

I take it it is not appropriate that in this letter I go into the details of the basis for the foregoing offer which we have discussed in such detail. The essential facts are as follows.

The undepreciated rate base of the Whole Company as fixed by the Tennessee Railroad and Utilities Commission is approximately	\$12,000,000
[fol. 3796] The transportation properties are in the rate base at	4,000,000
This leaves a balance for electric properties of	\$8,000,000
You retain the Waterville-Kingsport transmission line (a self-supporting unit) which is in the rate base at	1,300,000
Leaving a balance of electric property of	\$6,700,000

COMPLAINANTS' EXHIBIT No. 867 (Excluded)

You have on your books a minimum of property not used or usable, plus superseded property of	700,000
Leaving a total for electric properties of	\$6,000,000
You have on hand cash and cash items of \$1, 700,000 of which there is available for these purposes not less than	\$1,200,000
Leaving a balance of	\$4,800,000

Against which you have our offer of \$5,250,000

Or we can state the proposition in another way: We are offering to buy all your electric property which you are in a position to sell at a price which covers the very maximum of the value on which you have been earning a return, [fol. 3797] which rate base has been accepted by the Company and has been the basis of its operations. The Company is left with a transmission line which is self-supporting under a guaranteed income provided by contract between the Carolina and Appalachian Companies. As to the street railway, we are proposing a plan in cooperation with the City which, for the first time in many years, will take that property out of the red and give it substantial earnings. At the present time it is subsidized by electric users, contrary to law.

Looking at the matter from the point of view of your capitalization, we have this situation: You have a total capitalization of \$17,780,000; \$7,780,000 in bonds, \$5,000,000 in preferred stock, 85% of which is held by National Power and Light Company, and \$5,000,000 in common stock, all of which is held by National Power and Light Company.

According to the report to the President of the United States of the Federal Trade Commission's accountants, the difference between your capitalization and the rate base is accounted for by certain write-ups effected at the time of the re-organization of this Company late in 1930. This [fol. 3798] report indicates that as between October 30, 1930, and the following day, November 1, 1930, without any addition to property, the assets were written up \$4,560,442.34. This write-up, together with other appreciation of property at the time of the re-organization, totals \$4,945,117.78. With the elimination of this write-up by writing off

COMPLAINANTS' EXHIBIT No. 867 (Excluded)

the common stock of \$5,000,000, there is close agreement between your capitalization and the rate base of \$12,000,000. Inasmuch as the Tennessee Valley Authority's offer of \$5,250,000 is a fair one as measured by the rate base of \$12,000,000, it is also, therefore, a fair one as measured by the capitalization after write-ups have been eliminated, i. e., about \$12,000,000.

This offer is contingent on the ability of the Authority to negotiate a satisfactory contract with the City of Knoxville whereby the City engages to acquire the distribution system within its corporate limits.

The City of Knoxville, as you know, is engaged in the preliminary work of constructing its own distribution system. The City has advised that by June 15 it will be required to make extensive commitments to contractors which will preclude the possibility of purchasing the existing plant. [fol. 3799] In view of the public demand in Knoxville for a publicly-operated electric system, it is imperative that this matter be disposed of promptly. The offer made in this letter will, therefore, expire on June 14, 1934.

The right of the people of Knoxville to serve themselves with electricity, and to become part of the President's "yardstick area" is surely not open to doubt. The foregoing proposal gives effect to that right, and yet protects the electric investor against the inevitable losses of competition.

Very truly yours, Tennessee Valley Authority, by
David E. Lilienthal, Director and General Counsel.

DEL.JH.

National Power & Light Company,
Two Rector Street,
New York

June 8, 1934.

Mr. David E. Lilienthal, Director and General Counsel,
Tennessee Valley Authority, Knoxville, Tennessee.

[fol. 3800] DEAR MR. LILIENTHAL:

This will acknowledge receipt of your letter of May 28th in reference to the purchase by you of certain property now owned by the Tennessee Public Service Company. The de-

COMPLAINANTS' EXHIBIT No. 867 (Excluded)

lay in answering is due to the fact that it did not reach my office until May 31st and the week-end prevented us from holding a meeting of the Board of Directors of National Power & Light Company until Monday of this week. This Company has a large investment in the Tennessee Company. We wished also to give your letter the deliberation it deserves because the acquisition which you propose that the Federal government should make may well be, and perhaps must be, a precedent for the future, and precedents should be as carefully established as they are likely to be regarded.

At the outset permit me to state that we appreciate the spirit of cooperation with which you have approached this difficult problem. As I have many times said to you, we are desirous of cooperating with the Government's Tennessee Valley Experiment to the greatest possible extent but in so doing we must perform the duty with which we are charged in protecting the large number of investors who have actually invested their money in the securities of the Tennessee Company all of which securities were issued with the approval of duly constituted and lawful authority.

We freely admit the right of the people of Knoxville to serve themselves with electricity and to become part of the President's "yard-stick area." However, consideration should be given to the following facts regarding the Tennessee Public Service Company and those who have their money invested in its property. The Tennessee Company owns and operates electric distribution properties and a street railway system in Knoxville, electric distribution properties serving some twenty-four communities and a considerable number of rural customers elsewhere in Eastern Tennessee and an extensive transmission system for supplying hydro-electric power to these properties. All of these properties comprise a single corporate and physical entity. All have been financed through one capital structure and all are subject to the same mortgage. The property is operated as a unit and in order to fulfill the obligations to the public to render dual electric and transportation service these properties can best be operated jointly, whether [fol. 3802] such operation be under governmental or private auspices. The transportation business in Knoxville in itself

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is not self-supporting nor is the electric business by itself in some of the small communities and rural districts.

The Company is a going concern with a long and successful history behind it. It is rendering the best service to its customers at reasonable rates approved by the State Commission and is paying its bond interest and earning a return for its stockholders. Except for the situation which has arisen through the activities of the Tennessee Valley Authority in the territory, supplemented by the agreement of the Public Works Administration (another agency of the Federal Government) to provide the City of Knoxville with \$2,600,000 (\$600,000 by way of gift and \$2,000,000 on loan at 4% interest) with which to build a competing electric distribution system in Knoxville, there is every reason to believe that the Company could and would continue to live and prosper. Large amounts of money have been invested by a great number of people in this Company in reliance upon the protection of the laws of the United States and the State of Tennessee. There is every reason to believe that the street railway situation could be worked out over a reasonable [fol. 3803] period of time to the satisfaction of all concerned and that these security holders would continue to receive a fair return upon their investments were it not for the activities of the Tennessee Valley Authority and the competition made possible through Federal funds. The Company is not a willing seller and it seems to us that if the Federal government desires to change the situation and that the electricity served in the territory by governmental agencies it should in all fairness return to these investors the money which they have invested. Under the extraordinary circumstances surrounding this case we have not at any time suggested that you do more than provide for the bonds and preferred stock of the company.

You have offered to purchase for \$5,250,000 a large part of the Company's electric property. This offer, entirely aside from its adequacy, will not pay off the bonds. Your counsel, as well as our own, agree that this must be done before the properties you desire to purchase can be released from the lien of the two mortgages. Until these properties are so released we are at a loss to understand how we are in a position to sell them to you. Even if the price were fair [fol. 3804] and it were possible to accomplish the release

COMPLAINANTS' EXHIBIT No. 867 (Excluded)

from the lions of the mortgages, the Company would be deprived of its best properties and would be left with property which even with your helpful suggestions as to relief as to the railway, we feel will be unprofitable.

We appreciate and our security holders must likewise appreciate the situation in which they are placed and that they are faced either with ruinous competition made possible by agencies of the Federal government or with selling at such price as you may offer. Under the constraint of these circumstances we repeat again that in a desire to cooperate to the greatest extent possible with the Government's Tennessee Valley program we are prepared to evacuate the territory served by this Company, so that you may conduct your experiment unhampered by competition, provided our security holders are dealt with fairly.

We know it is the desire of yourself and the Federal government to deal with those security holders fairly and justly, but we think the offer you have made does not accomplish this end as it will not even pay off the bonds much less allow anything for the preferred stock.

[fol. 3805] There are some points in your letter of May 28th that should be clarified.

First. We think that it should be recorded that the construction of the proposed competing system in Knoxville is made possible only by the grant to the City of Public Works Administration funds to the extent of \$2,600,000, of which \$600,000 is an outright gift and \$2,000,000 a 4% loan, and also that the offer of the City to buy the Company's local distribution system was not in cash but in bonds which at the time were quoted in a very limited market at about 75% of par. This offer was impossible of acceptance because it would take for an inadequate price the principal source of the Company's revenue and leave it with its unremunerative property.

Second. There seems to be a misunderstanding as to the Company's 110 kv. transmission line extending from Waterville to Kingsport. We offered to sell you all of the property of the Company or all of the stock of the Company owned by National Power & Light Company. We are willing to sell you this transmission line along with the other property you indicate.

COMPLAINANTS' EXHIBIT No. 867 (Excluded)

Third. We think our security holders should know something of the permanency of the street railway arrangements you suggest and what is meant by your offer to put it on an earnings basis, that is, will it merely pay operating expenses and no more or on what investment will it earn interest. For how long will the City agree to the reduced taxes of \$22,000 a year and to relief from repair to track zone? They should likewise be informed of the length of time the Authority is willing to transmit power for the operation of the Railway system, and if the Company accepts your offer also to supply such power, for how long a time and on what terms the Authority will supply it.

Fourth. We notice that at your option you can pay us in cash either at one time or in deferred payments. As you are somewhat familiar with our mortgage problems we assume you intend that the mortgages will remain a lien on the property until the final payment is made. However, I think our security holders should be definitely informed as to this and as to how you propose to take title and operate these properties until final payment.

Fifth. Our computation of the electric rate base is different from that contained in your letter and is as follows:

[fol. 3807] The rate base of the whole Company at December 31, 1933, exclusive of \$500,000 working capital was	\$12,123,576
Deducting the transportation properties which are in this rate base at	4,042,606
Leaves a balance for electric properties	8,080,970
To this should be added the electrical supplies and equipment on hand covered in your offer and not included in any of the figures above of approximately	100,000
Total of	8,180,970
Less the amount of miscellaneous property included in the electric rate base excluded from your offer	700,000
Leaving a total of	7,480,970
If the Waterville-Kingsport transmission line is retained (although we again renew our offer to sell) it is in the rate base at	1,292,334
Leaving a balance of	6,188,636

COMPLAINANTS' EXHIBIT No. 867 (Excluded)

Against which we have your offer of	5,250,000
Or less than the rate base of the property which	
you propose to buy by	938,636

[fol. 3808] From the foregoing it will be seen that your offer for the property you desire to acquire is almost \$1,000,000 less than the rate base and does not give the company an excess of \$450,000 as computed by you.

We do not understand why in your computation you deduct the \$1,200,000 cash from the rate base since this money has no relation to the property included in the rate base nor does any of it represent or stand in lieu of any of the property included in the rate base.

Sixth. You state that the Waterville-Kingsport line is self-supporting. The contract which makes this so expires on December 31, 1938.

Seventh. The transportation system is necessary to the city of Knoxville. In the public interest it can best be operated jointly with the electric property whether such joint operation be conducted under governmental or private auspices. The Tennessee Commission and the Company have in the past deemed it in the public interest to treat the electric and street railway properties together, this policy having been pursued in cases affecting other companies. This had been done by this company pursuant to the wholesome policy of the Commission and, we are advised [fol. 3809] by counsel, is not in any sense illegal or contrary to law as suggested in your letter.

Eight-. You make reference to the capitalization of the Company and to a recent investigation by the Federal Trade Commission and in this connection you refer to "certain write-ups." At the time of the re-organization in 1930 the plant accounts were restated to reflect the values determined by an independent valuation engineer, which values were substantially in agreement with a detailed inventory and appraisal made in 1920 by engineers for the State Commission and the Company, plus actual cash expenditures for improvements and betterments from then until the date of re-organization. Also National Power & Light Company, at the time of the re-organization, put \$1,000,000 in cash

COMPLAINANTS' EXHIBIT No. 867 (Excluded)

into the Company, in addition to its large investment already made so that at the date to which you refer the capitalization was in accord with the value of the assets. The facts as to capitalization have been before the Authority since the early stages of our negotiations. The re-statement of plant accounts (so-called "write-ups") at the time of re-organization was entirely justified and proper and furthermore it has no bearing on and is not pertinent either directly or collaterally to the negotiations now at hand since [fol. 3810] at no time have we ever suggested anything more than that the investors in the bonds and preferred stock be taken care of.

Ninth. We think the security holders should be informed as to what provision is to be made for cancellation of contracts, leases, and all other items that must be settled on account of the closing down of the Company's electric business, and the disposition of property jointly used by the electric and transportation departments some part of which is included in the rate base of the transportation properties. Among these contracts is a power contract with the Carolina Power & Light Company under which the Tennessee Company will be required to pay an amount equal to the two-year minimum in order to effect the cancellation of this contract. This minimum is \$534,000 for each year, less such power as the Company may require during the year for the operation of its remaining properties. If the Tennessee Company avails itself of the offer of the Authority to sell its power for railway purposes, the Tennessee Company would be obligated to pay the Carolina Company the full specified two-years minimum. This payment is required by [fol. 3811] the terms of the contract and does not cover the loss to be sustained by the Carolina Company through the permanent severance of this business.

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If the holders of the bonds or the preferred stock of the Tennessee Company are to be confronted with the necessity of accepting less than the amount of their investments or with facing destructive competition, then there would seem to us to be open for consideration the following alternative lines of procedure.

COMPLAINANTS' EXHIBIT No. 867 (Excluded)

I

Tennessee Public Service Company might take the necessary corporate action as rapidly as possible, which should not require more than about two weeks, to give you an option for a reasonable period to acquire all of its electric properties, including the Waterville-Kingsport line, (with some reasonable reservation for the transmission of power over it), the power house and material and supplies having a rate base of \$8,180,970, in return for disposal by you of all of the Company's bonded indebtedness of \$7,780,000 principal amount. Without exceeding the redemption price of the bonds you would obtain complete and practically immediate control of the situation (you in the meantime to cause [fol. 3812] that status quo as respects competition and preparation for competition to be preserved.) In carrying out the program we think it would be unnecessary for the Authority to take ownership of the bonds.

While the stockholders of the Company (after discharging the obligation to Carolina Power & Light Company under the existing power contract) would be left with only a small part in value of their actual investment, nevertheless in order to avoid the consequence of competition with which the security holders are threatened, we would propose to the stockholders that they approve the transfer to you of the properties upon cancellation through your efforts and at your expense of all bonded indebtedness. The responsibility for dealing with the bondholders shall be solely yours.

II

If the foregoing is unacceptable to you, then we suggest, in view of the precedent to be established here, its far reaching effect on security holders generally and the difference between us, both as to figures and basic principles involved, that, with the approval of our security holders, the whole matter be submitted to arbitration—you to appoint one arbitrator, we to appoint one and the third to be appointed by the Chief Justice of the United States.

If our security holders are to be confronted with accepting the \$5,250,000 which you propose, or with facing destructive competition, then we believe that the problem must be taken

COMPLAINANTS' EXHIBIT No. 867 (Excluded)

directly to the security holders, as obviously the Board of Directors of the Company could not, even if it were so disposed, give away any of the assets of the Company.

It is, we believe, the opinion of your counsel, as well as our own counsel, that the properties which you propose to purchase cannot be released from the mortgage liens, except by complete discharge of the two mortgages. Since the amount you offer is not sufficient to discharge the bonded indebtedness of the Company, the desired properties could not be sold to the Company's bondholders' committee. While such an organization could probably be started reasonably promptly it would require some time and expense to comply with the Federal Securities Act, to procure the necessary deposits of bonds and to get the necessary binding acceptance from the bondholders.

[fol. 3814] The stockholders would also have to be dealt with. If any proposition were submitted to them which would leave little or nothing for their investment, there is considerable question as to whether or not those who might be asked to vote stocks held by corporations, trust estates, institutions, etc. could legally vote in favor of the proposition and there is the practical question as to whether or not individual stockholders could be induced to vote their stock for a proposition which would in effect wipe out its value. So far as the National Power & Light Company is concerned, the legal question presented might be met by acting upon a vote of instructions from the stock of the National Company held by the public. Whatever the detailed procedure might be, it would be of course necessary to have action by the stockholders of Tennessee Public Service Company and it would be essential to work out some plan which could, as a legal and practical matter, get the necessary stockholders' approval.

We realize that this situation presents a perplexing problem to you as well as to ourselves and we sincerely hope that the suggestions herein may form the basis for a solution of the situation which will not entail too heavy a sacrifice [fol. 3815] on the part of the security holders.

Yours very truly, (Signed) C. E. Groesbeck.

COMPLAINANTS' EXHIBIT No. 867 (Excluded)

June 12, 1934.

Mr. C. E. Groesbeck, Chairman, Board of Directors, Electric Bond and Share Company, 2 Rector Street, New York, New York.

DEAR MR. GROESBECK:

This will acknowledge receipt of your letter of June 8 replying to the Authority's letter of May 28 wherein an offer was made for the purchase of properties of the Tennessee Public Service Company.

The attitude expressed in the early pages of your letter toward the agencies of the public which are involved in this situation disturbs me a great deal for it may be a greater barrier to an agreement than the controversies respecting dollars and cents. You refer to the activities of the Tennessee Valley Authority in the area and to the loan and grant to the City of Knoxville by the Public Works Administration very much as if these two agencies were outside interests plotting the destruction of your business. [fol. 3816] You seem to forget that both the Tennessee Valley Authority and the Public Works Administration are instrumentalities of the people of the United States; that their activities which you thus decry are in execution of policies of the entire nation formulated under the constitution by the President and the Congress.

To my mind it seems clear that the public interest must come ahead of every other interest of whatever kind or character. Fairness to private investors is, however, an essential of sound public policy and our offer is based on this promise. Anxious as I am to keep these negotiations strictly on the plane of facts and figures I can not pass over the statements in your letter which depart from this basic principle without recording my earnest and vigorous disagreement. You offer to sell the Waterville-Kingsport 110 kv. transmission line. The Authority is willing to include this line in its offer at the cost to you of \$1,292,000. This is on the understanding, however, that the contract for the use of this line by your affiliate, Carolina Power and Light Company, whereby Tennessee Public Service is compensated for the use of the line, shall be assigned to the Authority for the balance of its term on the same terms and

COMPLAINANTS' EXHIBIT No. 867 (Excluded)

conditions. This makes our offering price \$5,250,000 plus [fol. 3817] \$1,300, for this line or a grand total of \$6,550,000.

In round numbers with your cash on hand of \$1,700,000 you will have cash of \$8,250,000, enough to pay off all the bonds at par with a substantial balance for stockholders, of cash and of operating property. This remaining property under our plan will be on a basis of net earnings after expenses and depreciation.

You and I have spent many days in the past three months during which you have been most patient and courteous discussing what would be an adequate price for these properties. It would be pointless for me to record here our reasons for believing the Authority's offer as here supplemented a reasonable one or to answer in detail each of the many points raised in your letter of June 8. I should emphasize, however, that the rate base of the total property \$12,000,000, discussed in our letters is undepreciated. The fact is, of course, that the property has depreciated since the items were installed and is worth less than when new. The accrued depreciation on the property as a whole is not far from twenty per cent which on the rate base figure of \$12,000,000 means that \$2,500,000 is to be deducted in de-[fol. 3818] termining present value. I need not here make similar computations as to electric property only, nor on different conditions per cent. The point is that our offer on a property basis is fair to the company.

The Board disagrees with your conclusions as to the relation of the street railway and electric businesses. I have gone over this with you and your associates at such length that I see no point in again setting out our reasons. The fact that your Company has not in past years made provisions for the foreseeable obsolescence and ultimate retirement of this property out of current operations as other utilities all over the country have done offers no reason why the Federal Treasury should now accept the responsibility to bail out this white elephant. The offer of the City to abate the Company's track zone maintenance and repair obligations and the suggestion toward lessening the tax burden I understand from representatives of the city are to be permanent. The Authority's offer respecting power supply is for any reasonable period you may suggest,

COMPLAINANTS' EXHIBIT No. 867 (Excluded)

not to exceed ten years. The rates are the Authority's standard wholesale rates to industrial customers, copy of which your Mr. Root has in his files.

[fol. 3819] You have correctly pointed out that the method of payment set out in our letter of May 28 introduces some complications. On tender of conveyance satisfactory to our counsel the Authority is ready to pay the entire purchase price in cash. If expected appropriations are made available this letter supplements the Authority's offer of May 28 and is extended on the same conditions as are set out in that letter, except that the date of expiration of the offer is extended to include June 20, a week from your receipt of this offer.

The Tennessee Valley Authority has entered into these negotiations in an effort to find a peaceable and constructive way of carrying out a public purpose, a national policy declared by the people of the country through their President and their Congress.. We trust that your letter setting up as it does an unacceptable proposal and an unacceptable principle does not mean that these efforts toward peace be abandoned.

Very truly yours, Tennessee Valley Authority, by
David E. Lilienthal, Director and General Counsel.

[fol. 3820] COMPLAINANTS' EXHIBIT No. 868 (Excluded)

TVA Press Release of June 22, 1934

Jackson, Tenn.—June 22—The Tennessee Valley Authority not only is working toward a better balanced economic life for the Tennessee area, but it is as well pointing the way toward a better balanced economic life for the nation, David E. Lilienthal, Director in charge of power for the TVA told a mass meeting of civic leaders from several West Tennessee cities here today.

"The Tennessee Valley project translates into concrete form a vision of President Roosevelt," he said. "The project was born in his mind, and it is being carried forward under his guidance. It is part of a program for national development. It is not a local project. Its implications extend to the outermost reaches of this country.

COMPLAINANTS' EXHIBIT No. 868 (Excluded)

It is this objective that justifies the huge expenditure of Federal funds in one section of the County."

Creation of the Authority, he said, is a great tribute to the South, but he added that at the same time it is a challenge to the South.

"It is a challenge," he said, "because it calls for the highest degree of leadership among the men and women of this area.

"I am not an alarmist, but I want to warn you that [fol. 3821] powerful forces are at work to deprive the South of the greatest opportunity which ever came to any people. A year ago the disciples of greed and blindness that brought this country to the verge of a collapse had hurried into the storm cellars, whimpering and crying for help.

"Now that a courageous leadership has enabled the country to weather the storm, these selfish and ignorant forces are coming out of the storm cellars and once more getting in their deadly work.

"The people of the country must choose whether to follow the leadership of the President or the leadership of the selfish and blind that brought us so close to destruction.

"The first great test is in your hands here in the Tennessee Valley. Under the cover of various disguises, powerful forces are at work to destroy the long-time objectives of the Tennessee Valley Authority. In order to fill their own pockets, these powerful groups are ready at any cost to destroy the Tennessee Valley Authority's program and to keep the President's objectives from being fulfilled.

"Whether the people will win or the disciples of selfishness and blindness will win depends on you. There is no force, [fol. 3822] however powerful, however subtle, however firmly entrenched, which can withstand the force of a united public opinion."

Urging his audience to refuse to listen to the voices of "those of little vision and of selfish purpose," Mr. Lilienthal said the program would succeed "only if you of the Valley treat this as a national program".

Mr. Lilienthal laid emphasis on the point that the Authority's program is not a local project.

"Its implications extend to the outermost reaches of this country."

COMPLAINANTS' EXHIBIT No. 868 (Excluded)

He said that program for a better balanced economic life must begin with the fundamental proposition that the purchasing power of the average man and woman must be increased and must be stabilized.

"This is the cardinal point in the work of the Tennessee Valley Authority which underlies all of its activities," he said. "This is no over-night job. We are here at grips with the most desperate problem of modern life, a problem [fol. 3823] which has swept away the democratic form of government in most of the countries abroad. But in our own country, fortunately for the American people, this struggle to increase and stabilize the income of the average man and woman will be carried on, as the President has said, under the principle of 'self-help and self-control'.

"Increasing and stabilizing the purchasing power of the people involves at least two points; first, the income which the people now have must be made to go as far as possible; and second, there must be new sources of income.

"The electric program of the Tennessee Valley Authority has particular reference to increasing the available income of our people through making the consumer's dollar go further, both in securing for him more electrical energy for his dollar through lower rates, and by making possible the purchasing of electric appliances at lower costs. The Authority's program of working with the people of the area in developing large-scale and small-scale industry is designed to produce additional sources of income."

[fol. 3924] COMPLAINANTS' EXHIBIT No. 869 (Excluded)

TVA Press Release of June 23, 1934

David E. Lilienthal issued the following statement today concerning the electric distribution systems in northern Alabama:

"After further negotiations the TVA today received a revised offer for the sale to the TVA of the electric distribution properties of the Alabama Power Company in North Alabama.

COMPLAINANTS' EXHIBIT No. 869 (Excluded)

"The price fixed is one with which the Authority is in substantial, though not entire, agreement, provided the final figure is likewise agreeable to the municipalities involved, inasmuch as the plans contemplate resale of these properties to the communities.

"The Authority will confer with them at an early date to learn whether such a program is acceptable to them, or whether they prefer to press their applications for loans from PWA with which to construct new plants.

"The Authority believes that the purchase at a fair price will be in the public interest, as it will eliminate the delay involved in completing new distribution systems, and will avoid substantial losses to investors arising out of competition."

[fol. 3825] COMPLAINANTS' EXHIBIT No. 870 (Excluded)

TVA Press Release of July 1, 1934

Surveys are under way to determine the most feasible sites for additional dams on the Tennessee River and tributaries, Arthur E. Morgan, Chairman of the TVA, announced today. The surveys and studies are being made under the direction of Carl A. Bock, assistant chief engineer.

"Contrary to widespread opinion," Mr. Bock said, "definite sites for additional dams have not been located. Before this can be done many time-consuming operations are inevitable.

"First, it must be determined where additional dams would be of most value in a progressive, integrated development of the entire Tennessee River watershed, having in mind the well-being of all citizens.

"These studies require time. A detailed topographic survey which enables engineers to compute the length and height of the dam, the cubic yards of earthwork and concrete involved, best arrangement of power house, spillway and other auxiliary structures, and other problems must be worked out. Of vital importance is the nature and condition of the foundation, and it must be thoroughly explored; perhaps more than anything it influences the cost of the [fol. 3826] dam. This usually takes several months. Frequently dams are located in such inaccessible places that

COMPLAINANTS' EXHIBIT No. 870 (Excluded)

special highways must be built to handle the enormous amount of materials. A study of the flow of the river, of the capacity of the reservoir and of the cost estimates on each of the sites that appear most favorable, must be made. And finally, after the exact location is decided designers and draftsmen must make the actual working plans. More than a thousand drawings had to be made before work on Norris Dam could start."

Mr. Bock said that residents of the Valley should regard the Authority's power development as a single unit, rather than as the creation of a number of individual power dams.

"It's an error of judgment for the people living near the upper tributaries, for instance, to believe that a storage reservoir there is for the particular benefit of persons living elsewhere in the Valley," he said. "We are not proposing to build seven or eight separate power dams, operated individually for the benefit of the immediate vicinity. All dams, wherever located, will be linked by transmission [fol. 3827] lines and will thus form a single system. Regard the whole project as 'one huge dam,' if you wish to put it that way. No matter in which section of the Valley the electricity is generated, it will be available to all sections. But each of these individual dams, under construction, or in contemplation, is needed to create this unified, integrated system."

[fol. 3828] COMPLAINANTS' EXHIBIT No. 871 (Excluded)

TVA Press Release of July 6, 1934

David E. Lilienthal, Director of the Tennessee Valley Authority in charge of power, today announced the submission of a plan to the communities of north Alabama which will make cheap power available immediately in this area. The cities involved are Courtland, Decatur, Falkville, Hartselle, Moulton, Red Bay, Russellville, Town Creek, Cherokee, Leighton, Tuscumbia, Sheffield, and Florence.

These communities have attempted, without success, to purchase existing Alabama Power Company facilities. The announcement of the Authority stated that TVA has secured

COMPLAINANTS' EXHIBIT No. 871 (Excluded)

an option on such facilities at fair prices and that, under the proposed plan, these facilities would be taken over immediately by TVA, which would re-sell them to the various municipalities when the facilities have been improved and expanded and the municipalities were in a position to take them over. The details of the plan are as follows:

1. The TVA will buy the distribution systems in these cities from the Alabama Power Company and will then proceed to rehabilitate the properties and to add thereto a number of farmers' lines.
2. TVA will then operate these systems directly for a [fo]. 3829] limited period, selling cheap Muscle Shoals power to the consumers in this territory.
3. When the systems have been improved and expanded and the municipalities are in a position to take them over, TVA will transfer these systems to the municipalities which will pay for them out of surplus plan earnings, without the necessity of making a cash outlay or pledging their credit. Until the systems have been completely paid for by the municipalities, the rates to be charged will be the regular TVA rates plus a 10 per cent surcharge. By means of this surcharge, it is contemplated that the systems will be completely free of debt, interest and amortization in ten years or less. After providing for all costs and obligations, the balance of the earnings in this area, during the period of direct operation, will be used for reducing the purchase price to municipalities.
4. TVA and its subsidiary, Electric Home and Farm Authority, will engage in an intensive program of domestic, industrial and commercial load building in this territory, utilizing EHFA facilities, making available low priced electric appliances to consumers upon the EHFA long term financing plan.

[fol. 3830] COMPLAINANTS' EXHIBIT No. 872 (Excluded)

TVA Press Release of July 14, 1934

Carl A. Bock, assistant chief engineer of the Tennessee Valley Authority, today made the following announcement concerning a dam on the French Broad River near Asheville, N. C.:

"The Tennessee Valley Authority has been importuned by many people to prepare designs for a water power dam and regulating reservoir on the French Broad just above Asheville. The topography of this site affords a natural reservoir basin which, considered for its physical aspects alone, is one of the best of such sites in the Tennessee Valley. However, the preliminary data available at the present time regarding this proposed project appear to indicate that the cost of water power produced there would be so much greater than the cost of similar power produced at other locations, that we are forced to the conclusion that the construction of a dam at this site is not economically justified at the present time."

[fol. 3831] COMPLAINANTS' EXHIBIT No. 873 (Excluded)

TVA Press Release of July 15, 1934

Athens, Ala.—July 15—Consumers of electricity in Athens, Alabama, received greatly reduced bills for the month of June, the first bills to be figured at the now low TVA rates. In all cases consumers found substantial reductions ranging from 40 to 70 per cent on their electric bills. The contract between the City of Athens and the Tennessee Valley Authority became operative on June 1, 1934. Before that time the City was buying power from the Alabama Power Company, and was then charging for electricity at rates much higher than the present TVA rates.

[fol. 3832] COMPLAINANTS' EXHIBIT No. 874 (Excluded)

TVA Press Release of July 15, 1934

The Tennessee Valley Authority will furnish low cost TVA power to the 13 cities and towns of northern Alabama

COMPLAINANTS' EXHIBIT No. 874 (Excluded)

which have requested service under a plan recently announced by the Authority.

David E. Lilienthal, TVA director in charge of power, announced today that the Authority's option on the properties now owned by the Alabama Power Company would be exercised.

"All of the thirteen cities and towns in North Alabama have now formally requested the Tennessee Valley Authority to put into effect the plan recently laid before them," Mr. Lilienthal said.

"The Authority will, therefore, proceed to exercise its option to purchase transmission and distribution facilities in North Alabama. Thereupon a petition will be filed with the Alabama Public Service Commission requesting its approval of the transfer of these distribution facilities from the power company to the TVA. Such approval is necessary before a transfer can be effected. With such approval [fol. 3833] of the Commission, and a transfer of title, Muscle Shoals power will be available to homes, farms, and industries in these six counties without further delay.

"The Electric Division has already completed its plans for the substantial rehabilitation and extension work which is part of the plan. The long effort of the people of these communities to obtain the benefits of Muscle Shoals power at low rates is about to be realized.

"The prompt action of the municipalities of North Alabama in cooperating with the Tennessee Valley Authority in this matter is further evidence that the people of Alabama are solidly behind the President's program."

The municipalities soon to be served with TVA power are: Courtland, Decatur, Falkville, Hartselle, Moulton, Red Bay, Russellville, Town Creek, Cherokee, Leighton, Tuscumbia, Sheffield, and Florence.

[fol. 3834] COMPLAINANTS' EXHIBIT No. 875 (Excluded)

TVA Press Release of July 17, 1934

After continuous negotiations extending over a period of several months, an agreement has been reached between the Tennessee Valley Authority and the National Power and Light Company, owners of the Tennessee Public Serv-

COMPLAINANTS' EXHIBIT No. 875 (Excluded)

ice Company, whereby the company's electric property in eastern Tennessee is to be sold to the Tennessee Valley Authority. Consummation of the arrangement is contingent upon approval by the City Council of Knoxville of a plan whereby the Knox County distribution facilities thus acquired by the TVA will be sold to and operated by the City of Knoxville. The transaction is also contingent upon willingness of bondholders to turn in their bonds at the issue price of 96½. The major facts concerning the arrangement between TVA and National Power and Light Company, owners of Tennessee Public Service Company, are as follows as explained by Director David E. Lilienthal, who conducted the negotiations for TVA:

[fol. 3835] 1. The Tennessee Public Service Company will transfer to TVA all of its electric distribution and transmission facilities in East Tennessee, except the transmission line between Waterville and Kingsport, at a price of \$6,088,000. This price coincides with the rate base of the property as determined by the Tennessee Railroad and Utilities Commission, less \$700,000 deducted for property no longer used and useful, principally the steam generating plant located in Knoxville.

2. The Tennessee Public Service Company will arrange for a tie-in for the interchange of power between the facilities to be acquired from TPS, and Carolina Company, also a National Power and Light Company. This interchange arrangement will insure TVA against any possibility of service interruptions due to storms or other causes and will permit both TVA and Carolina Company to make the fullest and most economical utilization of their power. In consideration of these interchange provisions, the Tennessee Valley Authority will assume the obligations and receive the benefits of an interchange contract between the Carolina Company and the Tennessee Public Service Company which has two years still to run.

3. By the purchase of the TPS property, competition between the TPS and the City of Knoxville will be eliminated, [fol. 3836] and instead, the TVA and the City of Knoxville will acquire a going concern with more than 25,000 customers, together with a personnel trained and

COMPLAINANTS' EXHIBIT No. 875 (Excluded)

experienced in the operation of this plant. The plans of the TVA do not call for any change in operating personnel except after study and recommendation by the TVA Personnel Division.

4. The TVA policy will continue to be to confine itself primarily to generation and transmission, with local public agencies handling the distribution of electricity. The operation of the distribution facilities by TVA is specifically intended to be temporary, pending transfer to local public agencies. This purchase of distribution facilities is to prevent disastrous losses to investors in TPS arising out of the fact that the City of Knoxville itself was not in position to purchase the company as a whole.

5. The street railway property of TPS will continue to be operated by the company. TVA will undertake to secure the cooperation of the city in an effort to improve the earnings of the street railway company, reduce its expenses, and relieve it of its present obligations to maintain and repair the paving in the track zone.

"I am delighted over the successful outcome of this [fol. 3837] protracted and difficult negotiation," said Mr. Lilienthal. "The result is one which, in the judgment of the Board of Directors, has a sound business basis, permits very substantial savings to consumer immediately, and at the same time does justice to the investor and protects his investment from the impairment and possible destruction arising from competition.

"The contract between the City of Knoxville and the Public Works Administration, whereby PWA has loaned funds for the construction of a competing plant, will, I am advised, be continued in effect until the transaction between TVA and TPS has been consummated. Such consummation depends upon approval by the City Council of Knoxville, and upon the willingness of bondholders to turn in their bonds at the issuing price of 96½, within three weeks. If by August 8th, the company has not been able to get the bonds in at this price, there is no deal, and the City will then proceed to make an award for a new plant, bids on which are to be opened today. I anticipate no such contingency, as the price is eminently fair to the bond-

COMPLAINANTS' EXHIBIT No. 875 (Excluded)

holders, and has the approval of a committee of conservative institutional holders of these bonds."

Meeting with the Power Committee of the City of [fol. 3838] Knoxville Council today, Mr. Lilienthal explained the plans for operation of the system and acquisition of property by the various governmental units.

The system purchased from TPS supplies electric service to the City of Knoxville to the fifteen communities in Knox County, including Fountain City, and to twelve communities in eastern Tennessee outside of Knox County, including Newport and Jefferson City, he explained. This area has a population in excess of 133,000.

"The plan will result in substantial rate reductions, which will be made at an early date, and will enable the City of Knoxville and neighboring communities to acquire their distribution plants without the necessity of the issuance of bonds or other certificates of debt," Mr. Lilienthal said. "It will preserve without material change the revenues now derived by municipalities from taxes on electric system operations.

"Upon the satisfactory conclusion of pending negotiations, all of the transmission and distribution properties, except the transmission line between Waterville and Kingsport, of the Tennessee Public Service Company will be purchased by the Tennessee Valley Authority for the sum of \$6,088,000. For a short interim period these properties [fol. 3839] will be retained and directly operated by the TVA. During this time, the Authority will complete such engineering improvements and changes as are required to put the system into excellent operating condition and will engage in an intensive program of load development under the EHFA program of making available low cost electric appliances. At the end of this interim period, the distribution properties will be turned over to the various municipal and county units in the area which will assume responsibility for distribution operations."

Based upon the present purchase price, transmission properties in the area are valued at \$1,509,515 or 24.79 per cent of the total investment, Mr. Lilienthal pointed out. These properties will be permanently retained by the TVA for its wholesale power operations. Upon the same basis, the distribution properties included in the purchase are

COMPLAINANTS' EXHIBIT No. 875 (Excluded)

valued at \$4,578,485, or 75.21 per cent of the total, this sum representing the electric distribution systems which will be ultimately transferred to local operating units. The distribution facilities in Knox County, including the City of Knoxville, are valued at \$4,229,625, or 69.48 per cent of the total purchase price.

[fol. 3840] Low TVA rates will immediately be put into effect upon transfer of the properties from TPS to TVA. These new rates will be the standard rates plus a ten per cent surcharge. By means of this surcharge, cost of the system will be amortized. The surcharge will be the same throughout the area, but it may be necessary to maintain the surcharge for a longer period in the area outside of Knox County. It is estimated that the system in Knox County will be completely free of debt, interest, and amortization in from ten to twelve years; the period outside of Knoxville may run from twelve to fifteen years.

During this period of direct TVA operation, the property in the entire area will be treated as a single unit, and the sums available from revenues, after deducting all operating costs, will be used to reduce the price at which the properties will be purchased by local operating units.

Mr. Lilienthal announced the appointment of Lovick P. Miles of Memphis and Judge D. C. Webb of Knoxville, member of the firm of Green, Webb and Bass, as special counsel for the TVA in the TPS acquisition negotiations.

Mr. Miles will devote his special attention to the preparation of the various contracts incident to the purchase of the property from the Tennessee Public Service Company. Judge Webb will act as special counsel on title matters. Judge Webb's firm was previously employed to check titles on the property in East Tennessee to be acquired from the Tennessee Electric Power Company under the Commonwealth and Southern contract.

[fol. 3842] COMPLAINANTS' EXHIBIT No. 876 (Excluded)

TVA Press Release of July 18, 1934

The acquisition of electric properties by the Tennessee Valley Authority in the Knoxville area will result in very

COMPLAINANTS' EXHIBIT No. 876 (Excluded)

substantial savings to consumers in the near future. The new rates to be put into effect will be the standard Tennessee Valley Authority rates plus a 10 per cent surcharge for retiring the investment.

For the entire area, the grand total revenues for the year 1933 were \$2,212,343 for consumption of 71,584,000 kilowatt hours. Under the new rates, the bill for the same consumption would be \$1,331,365. This reduction in rates will yield to the community an annual saving of \$880,978, or 39.8 per cent. The saving for Knox County is estimated at \$803,000 per year and for the area outside of Knox County \$77,000 per year.

For the entire area, residential consumers will save \$374,000, or 50.4 per cent. Commercial users will save \$253,000, or 38½ per cent, and industrial users will save \$199,000 or 30.6 per cent. Sales to municipalities for street lighting and other purposes in Knox County for 1933 [fol. 3843] amounted to \$151,263. For the same consumption the new TVA rates would cost \$98,900, or a saving of \$52,300 per year.

As compared with the lowest possible rate now available on the TPS lines, a residential user having lights and small electrical appliances would save 81 cents per month, or 38 per cent. A residence user having a refrigerator and electric range, would pay \$6.95 under TPS promotional rates, and \$5.83 under TYA rate, including 10 per cent surcharge, and would save \$1.12 per month. A residence customer with a fully electrified home, including a refrigerator and electric range, water heater, lights, and small appliances, would pay \$8.45 under the TPS promotional rate as against \$7.15 under TVA rates and would save \$1.30 per month.

Commercial users, such as cafes, stores, professional businesses, etc., showed savings running from \$1.00 to \$15.00 per month, representing reduction from present rates of from 30 to 60 per cent.

Industrial users show savings ranging from 35 to 50 per cent, which will result in immediate expansion in the industrial uses of electricity.

One industrial user with a demand of 50 kilowatts pays \$3,288 per year under TPS rates. Under the TVA rates, [fol. 3844] his bill would be \$1,980, or a reduction of \$1,308.

COMPLAINANTS' EXHIBIT No. 876 (Excluded)

Another industrial user with a demand of 150 kilowatts would save \$3,500 per year or 41 per cent. A very large user with a demand of 500 kilowatts and a fairly high load factor would pay an annual bill under TPS rates of \$33,180 as against a TVA bill of \$17,292. Under the new rates, this consumer will save \$15,888 per year, or 47.9 per cent.

Further comparisons showing the marked reductions in rates that will soon be available are shown on the attached tables.

[fol. 3845] COMPLAINANTS' EXHIBIT No. 877 (Excluded)

TVA Press Release of July 18, 1934

"The TVA has been at work seeking to develop new uses for coal, so that the mining area can prosper with the rest of the region, Chairman Morgan said. "In some cases the existence of cheap power leads to a demand for more coal. For instance, the Authority has been negotiating with a large chemical industry which must have very cheap electric power, and also large amounts of cheap coal for chemical processes. The locality which seemed more promising is near a coal mine and also where TVA cheap power is available."

"There is no question but that in the years to come coal will be so valuable for use in chemical, metal and other manufacturing processes that it will seem a waste and misuse to use our coal resources for power where water power is available. It is the business of the Tennessee Valley Authority to try to combine both these values—to get the undoubted economics and values of water power, and also to work vigorously to develop new and additional uses for coal so that it will be used in constantly larger quantities.

[fol. 3846] A region which has both coal and water power is very fortunate. The combination of the two make possible the development of industries that could not thrive so well with either one alone. Such a development of the highest use of the whole resources is a part of economic planning.

[fol. 3847] COMPLAINANTS' EXHIBIT No. 878 (Excluded)

TVA Press Release of July 27, 1934

The Tennessee Valley Authority today approved the contract covering purchase of the Tennessee Public Service Company properties in Knoxville, and East Tennessee, David E. Lilienthal, Director in charge of power, announced. The contract, drawn in a series of conferences at Asheville, North Carolina has been signed by officers of the Power Company. It does not include the Knoxville Street Railway system.

Actual transfer of the properties is contingent upon bondholders turning in their bonds at the issued price of $96\frac{1}{2}$ before August 21, 1934. Each party to the contract also has a right to cancel its obligations if litigation or other contingency arises which in the judgment of either party will unduly delay completion of the purchase.

"This provision protects the city of Knoxville against extended delay in receiving benefits of TVA electricity for which its citizens voted", Mr. Lilienthal explained. "The City has opened bids for construction of its own system with which to distribute TVA electricity. If there is unreasonable delay in closing the sale, TVA will rescind the contract [fol. 3848] and the city can immediately construct a competing system."

Mr. Lilienthal explained that TVA has arranged with the Guaranty Trust Company of New York, whereby bondholders desiring to deposit their bonds under the agreement with TPS may deliver those bonds to the Guaranty Trust Company as the agent of TVA and receive in return TVA certificates of deposit. This certificate of deposit will entitle the bondholder to receive \$965 for each bond turned in, (that is, $96\frac{1}{2}$) together with accrued interest, if the deal goes through; if it does not go through, he is entitled to receive his bond back at the expiration of the period. Formal announcement of this deposit agreement plan will be made in a few days as soon as the necessary details have been worked—

The contract approved today embodies the general agreement between TVA and the electric company as announced on July 17th, with adjustments for contracts held by the Tennessee Public Service and real estate in which Knoxville Street Railway Company held a joint interest with the

COMPLAINANTS' EXHIBIT No. 878 (Excluded)

electric division of the company. These adjustments are, as explained by Mr. Lilienthal:

[fol. 3849] (1) Tennessee Public Service Company has a power contract with Carolina Company whereby it is obligated to purchase all of its power requirements from Carolina Company at a rate very much in excess of the rate at which TVA sells power at wholesale to municipalities. This contract terminates June 4th, 1936. As a part of the purchase plan, TVA is assuming this contract with the Carolina Company, but the contract has been substantially modified. Instead of being obligated to take and pay for all of its power requirements, TVA's obligations are limited to a demand of 20,500 kw., and a consumption of 19,320,000 kwh. quarterly, with TVA free to use any other source of supply for its excess requirements. Instead of purchasing power at the former high rates, TVA will purchase at its standard wholesale rate, except that the billing period will be three months instead of one month, thus giving the TVA the benefit of lower brackets for a large amount of power. TVA will make a lump sum payment of \$150,800 when it takes over the TPS properties and thereafter will pay quarterly for the power it takes under the contract.

(2) Under the contract TVA will transmit the Knoxville [fol. 3850] Street Railway's power requirements from the Carolina Company to the Street Railway sub-station until June 4, 1936, after which date the Street Railway's requirements will be purchased from the Authority at its regular rates.

(3) TVA agrees to pay \$6,088,636 for the electric properties of TPS. In addition TVA is paying \$102,000 for the purchase of the street railway's interest in certain properties which had heretofore been jointly used and owned by the street railway and the Electric Divisions of TPS. For this sum TVA eliminates the Street Railway's interest in the Washington sub-station and Steam Plant, the General Office on Gay Street, the General Storehouse and certain other joint properties in Knoxville.

(4) TVA agrees to pay for all net capital additions made between the present time and the date when TVA

COMPLAINANTS' EXHIBIT No. 878 (Excluded)

takes over the properties but TPS agrees not to make any such additions or extensions exceeding \$200.00 in value without the written consent of TVA.

(5) TPS agrees that until TVA takes the properties over, TPS will make all current repairs and replacements on the property just as though no change in ownership were contemplated.

[fol. 3851] "Upon the satisfactory conclusion of the negotiations, all of the TPS transmission and distribution properties, except the transmission line between Waterville and Kingsport, will be purchased by the Tennessee Valley Authority," Mr. Lilienthal said. "For a short interim period these properties will be retained and directly operated by the TVA. During this time, the Authority will complete such engineering improvements and changes as are required to put the system into excellent operating condition and will engage in an intensive program of load development under the EHFA program of making available low cost electric appliances at the end of this interim period, the distribution properties will be turned over to the various municipal and county units in the area which will assume responsibility for distribution operations.

"Low TVA rates will immediately be put into effect upon transfer of the properties from TPS to TVA. These new rates will be the standard TVA rates plus a 10 per cent surcharge. The surcharge will be the same throughout the area. It is estimated that the system in Knox County will be completely free of debt, interest, and amortization in from ten to twelve years; the period outside of Knoxville may run from 12 to 15 years."

[fol. 3852] COMPLAINANTS' EXHIBIT No. 879 (Excluded)

TVA Press Release of August 1, 1934

An Address by John B. Blandford, Jr., Tennessee Valley Authority, Coordinator. Presented July 31, over NBC Radio Hookup as One of the "You and Your Government" Series on a New Deal in Government, under Sponsorship of the Committee on Civic Education by Radio of the National Advisory Council on Radio in Education, and the American Political Science Association

The Tennessee Valley Program

One year ago, the three directors of the Tennessee Valley Authority held their first meeting in a hotel in Washington. Today, these directors in their offices in the Tennessee Valley look back upon more than a hundred similar meetings, and the activity and accomplishment of nearly 10,000 fellow workers.

Wilson Dam is turning out TVA kilowatts. The thirty-four million dollar storage dam on the Clinch River, near Knoxville, Tennessee, has received its first batch of concrete. The more-than-a-mile-long run-of-the-river dam on the Tennessee River, twenty miles above Wilson Dam, is excavating in its second coffer-dam. Both projects—Norris and Wheeler—are now one-fourth completed. Preliminary surveys are fixing the sites and determining the dimensions [fol. 3853] of future dams.

A power policy has been formulated. The content of the "yardstick" has been defined. Wholesale and resale rates have been fixed. The nucleus of a TVA power system has been established through the purchase of transmission and distribution facilities. A transmission line to connect Wilson, Wheeler and Norris dams is under construction. One hundred miles of rural transmission lines have been pushed out into new territory. Arrangements have been made to serve more than fifty municipalities at greatly reduced rates, and private power companies have been stimulated to substantial rate reductions in other parts of the valley.

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* * * In a substantial way, this program has helped in the unemployment emergency. But the Authority is

COMPLAINANTS' EXHIBIT No. 879 (Excluded)

not an emergency agency, nor exclusively a construction or operating organization. Underneath this surface picture is something more fundamental. Man power is transforming steel, cement, electric wire and phosphate into dams, kilowatt hours, and fertilizer. . . .

. . . The housing of workers is an opportunity for constructive personnel programs, and a demonstration in town planning and electrification of the home. A dam is [fol. 3854] not an isolated structure or operating unit, but part of a unified development of a water system with power produced at half the cost of unorganized development and with valuable by-products in flood control and navigation. A dam is the occasion for the planning of a region and a series of dams is an integral part of the planning of a valley.

Director David E. Lilienthal is buying power systems at fair prices and building lines where they do not now exist. He is accounting for his operations with full consideration for interest, depreciation, amortization and taxes, and thereby, establishing a "yardstick" for the nation. But more than this, he is looking into the average home and seeing a very limited use of electricity, and realizing that the full benefits of electricity are enjoyed by the few. Electricity can relieve the women in 20,000,000 American homes of much of the drudgery of housework and holds much hope for the rehabilitation of the rural areas.

But rates for service have been too high. The TVA rates are removing this obstacle. In Tupelo, the first city to utilize Muscle Shoals power, rates have been reduced [fol. 3855] sixty per cent, and the average use is more than fifty per cent greater than a year ago.

Electric appliance prices have been beyond the reach of many householders. The Electrical Home and Farm Authority, an agency of the TVA, was organized to meet this problem. With the cooperation of leading electrical manufacturers, dealers and the electric utilities, this agency has made it possible for housewives to obtain through regular dealer channels electric ranges, refrigerators and water heaters at prices from 25 to 35 per cent lower than those heretofore prevailing. The increased volume of sales is resulting in a fair profit to the manufacturer and retailers and is proving a great benefit to the consumer.

COMPLAINANTS' EXHIBIT No. 879 (Excluded)

Rounding out this program is an effort to spread the knowledge of all the ways in which electricity may be used.

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The Tennessee Valley Authority is a new and significant piece of governmental machinery. It has all the powers of government to enable it to do a unique job in regional planning, and it has the flexibility of a private corporation [fol. 3856] and freedom from red tape to do an efficient job of business operation. It ties together the facilities and special knowledge of Valley agencies, and the resources of all Federal departments. More than that, it ties together the experiences and aspirations of the Valley and the Nation. For in the final analysis, the program has national implications. Methods successfully worked out in the Tennessee Valley should have nation-wide application.

[fol. 3857] COMPLAINANTS' EXHIBIT No. 880 (Excluded)

TVA Press Release of August 7, 1934

The Tennessee Valley Authority announced today that it was sending David E. Lilienthal, director in charge of its electric program, and Llewellyn Evans, chief electrical engineer, to England to study the "grid" system of transmission and distribution as developed there.

They will sail on the U. S. Line Manhattan on August 15 and will be gone one month.

The trip is the result of the Authority's effort to formulate the best procedure and policy for the allocation and distribution of future large blocks of power to be available. Purchase of the Knoxville system and distribution of TVA power in East Tennessee will exhaust the capacity of Wilson Dam until completion of Norris Dam. Mr. Lilienthal has been studying the problem from the point of view of recommending a course of action and policy, but before the Board made any decision regarding the allocation of future blocks of power to municipal and other applicants, it desired to study at first hand important world projects that parallel the Authority's problems.

"The nearest analogy to the situation in the Tennessee Valley," Mr. Lilienthal said today, "is the Central Elec-

COMPLAINANTS' EXHIBIT No. 880 (Excluded)

tricity Board of Great Britain, now in its seventh year. [fol. 3858] "The so-called British Grid System represents the practical, forthright English approach to a problem of seeing that electricity is widely available for domestic and industrial use. Under the British Grid System, they have a combination of publicly-owned and privately-owned enterprises with the national Government owning all transmission lines and making arrangements with public and private enterprises so as to unify the power supply and thus utilize it in the most efficient way.

"As in the Tennessee Valley, decentralization of industry is one of the principal objectives and actual results have already appeared in this direction. In its governmental status and financial operations, the Central Electricity Board is closely comparable to the TVA. The Board is an independent agency, standing on its own, with a separate budget, separate issuance of securities, and is free from usual governmental procedure."

The trip to Europe also has a direct connection with Mr. Lilienthal's position on the newly created National Power Policy Committee. Chairman Ickes of the Committee has assigned him the problems of unification of power supply and the relations between public and private electric systems. In both of those the English Board has had years of [fol. 3859] practical experience.

Conferences have been arranged for Mr. Lilienthal and Mr. Evans with Sir Andrew R. Duncan, Chairman of the Central Electricity Board, and with Sir John Snell, G. B. E., chairman of the Electricity Commission of London.

The TVA officials also will visit Ireland to study the Shannon River Hydro-Electric development. This development has made progress with respect to rural electrification in a country where electricity had been heretofore very little used among farmers.

Inspection of the Shannon district will come first; the officials then will proceed to Dublin for a conference with Dr. F. S. Rishworth, chief engineer of the development. Following that they will go to London for ten days of conferences and inspections of the British Grid.

Following his return on September 14, Mr. Lilienthal will prepare a report of his findings both for the TVA directors and for the National Power Policy Committee.

[fol. 3860] COMPLAINANTS' EXHIBIT No. 881 (Excluded)

TVA Press Release of August 27, 1934

A total of 189 cities and towns, 24 counties, and 37 individual business firms have made inquiries or applications for Tennessee Valley Authority power.

Applications of the individual firms were made confidentially to the Authority and accordingly their identity is not disclosed.

The counties applying or inquiring are interested in furthering the Authority's program of intensive rural electrification.

The complete list of applicants, other than private firms, follows:

O—indicates official application.
I—indicates individuals.

Alabama	Alabama	Mississippi	Tennessee
O Cordova	Madison	O Fulton	O Memphis
O Mobile	Jasper	I Hillsboro	O Jellico
I Birmingham	Guntersville	O Tupelo	O Lawrenceburg
O Dalton	Falkville	O Winona	I Dyersburg
I Detroit	Danville	I Philadelphia	IO Lebanon
O Pritchard	Alabama City	I New Albany	O Pulaski
O Homewood	Geiger	O Oxford	O Bean Station

[fol. 3861]

Alabama (Cont'd)	Mississippi	Mississippi	Tennessee
I Tuscaloosa		O Pace	O Saltville
O Elkmont		I Mendenhall	O Union City
O Florence		I Water Valley	O Etowah
I Tuscumbia		Batesville	IO Nashville
I Lexington		Carthage	I Kelso
O Sheffield	O Quitman	Coldwater	O Dayton
O Muscle Shoals			
City	O Shelby	Columbia	O Clinton
I Cullman	O Starkville	Crystal Springs	O Knoxville
O Decatur	I Guntown	Duck Hill	I Rogersville
I Cottonont	I McComb	Greenwood	O Dickerson
O Athens	I Laurel	Grenada	O Sweetwater
O Hartselle	O Lexington	Hattiesburg	I Humbolt
I Gadsden	O Jackson	Hazlehurst	O White Pine
I Arab	I Indianola	Holly Springs	O Parsons
I Anniston	O Hernando	Naulka	O Ripley
I Talladega	O Hickory Flat	Pittsboro	O Savannah
I Hamilton	I Clarksdale	Itta Bena	I Southside
Bessemer	O Aberdeen	Mantee	I Soddy
Pinson	O Amory	Meridian	O Chattanooga
Russellville	O West Point	Morehead	I Tullahoma
Meridianville	O Corinth	Myrtle	O Winchester

COMPLAINANTS' EXHIBIT No. 881 (Excluded)

[fol. 3862]

Tennessee	Louisiana	Florida	Applications for Rural Electrification
O Newport	I Tallulah	I St. Augustine	
O Sunbright	I New Orleans	O Bradenton	
I McKinnon		I Miami	Alabama (Counties)
O Moscow			
I Mountpleasant			Colbert
O Lenoir City	Illinois		Lamar
O Johnson City		Virginia	Lawrence
O Jefferson City	I West Frankfort		Limestone
I Henderson		I Marion	
O Rockwood		O Galax	
O Fayetteville		I Danville	
I Dunlap	Oklahoma	I Abingdon	Georgia
O Decaturville		Appalachia	
I Daysville	I Tulsa	O Dungannon	Walker
I Clifton		O E. Radford	
O Culleoka		I Crewe	
O Big Sandy			
O Ardmore	Kentucky		Kentucky
O Elizabethton			
O Greeneville	I Hazard	Ohio	Harlan
O Jackson	O Scottsville		
Franklin	O Maysville	O Cincinnati	
Morristown	O Russell	I Akron	
Athens	O Middlesboro		Mississippi
Cookeville	Bowling Green		

[fol. 3863]

Decatur	O Somerset		Alcorn
Fountain City		Missouri	Coahoma
Leoma			Corinth
Murfreesboro		I St. Louis	Tishomingo
Powell Station	North Carolina		
Shelbyville			
Somerville	I Candler		
Tennessee City	I Shelby		Tennessee
Scotts Hill	O Weaverville		
	O Asheville		
Georgia			
I Rome	South Carolina		Anderson
O Monroe			Chester
I Calhoun	I Columbia		Claiborne
O LaFayette	I Anderson		Davidson
O Dalton	I Greenville		Franklin
O Atlanta	O Spartanburg		Giles
O Marietta			Houston
I Sandersville			Jefferson
I Rossville	Arkansas		Lawrence
I Ringgold			Madison
I Hiwassee	I Stuttgart		Meigs
Acworth	Blytheville		Montgomery
Cartersville	Oseola		Warren
Ft. Benning			Wayne

[fol. 3864] COMPLAINANTS' EXHIBIT No. 882 (Excluded)

TVA Press Release of October 1, 1934

The relation of power development in the Tennessee Valley to the St. Lawrence waterway project will be studied by trustees of the Power Authority of the State of New York in a personal visit to the Valley October 5th to 8th. This was made known by Chairman Frank P. Walsh of the New York authority in a letter to Director David E. Lilienthal of the Tennessee Valley Authority in accepting the TVA's invitation to inspect progress of the work on the Tennessee River basin project.

Fellow trustees who will accompany Chairman Walsh to the Valley are James C. Bonbright, Professor of finance at Columbia University; Fred J. Freestone, chairman of the executive committee of the National Grange; George S. Reed, New York lawyer, and Ieland Olds, secretary of the board. Said Chairman Walsh in his letter to Director [fol. 3865] Lilienthal:

"The Power Authority is charged with the development of a project affecting the entire northeastern section of the country, which may be regarded as your undertaking as a part of the President's broad plan for establishing the country on a more permanent basis of national well-being and prosperity.

"Your Authority's achievements in showing the way to lower electric rates and larger domestic and rural use of electricity have already been remarkable, especially in view of the shortness of the time since you undertook the work. Your plans for establishing a more stable relationship between agriculture and industry are also noteworthy.

"The Trustees of the Power Authority feel sure that the opportunity for direct personal conference with the members of your Board and for inspection of the work which you have so well under way will prove invaluable to them in making plans for utilizing the great hydro-electric power resources of the St. Lawrence to bring lower electric rates and greater prosperity to the region the project will serve."

"The Tennessee Valley Authority board of directors and the staff executives as well *will* would derive real benefit out of such visit, during which we could exchange ideas and get your reaction to many of the problems of the TVA,"

COMPLAINANTS' EXHIBIT No. 882 (Excluded)

[fol. 3866] declared Director Lilienthal in his letter of invitation, adding; "I believe you would find the work interesting and useful to you in carrying out the great project which has been entrusted to you."

Members of the Power Authority of the State of New York have expressed a deep interest in the TVA system of rural electrification, whereby farm residents receive the same low rate that those in the cities obtain. This TVA project is working exceedingly well in northeastern Mississippi. Another subject in which the New York body evinces keen interest is decentralization of industry. The TVA has made extensive research in this field.

Results obtained by the TVA in the cost of distribution of electricity will be made available to the New York visitors. Such costs have occasioned much study in the Empire State.

Conferences will be held with the TVA board of directors and a visit made to Norris Dam. An airplane flight over the basin area to Muscle Shoals will be included in the program to permit inspection of the Wilson Dam power plant and the construction work on Wheeler Dam.

[fol. 3867] COMPLAINANTS' EXHIBIT No. 883 (Excluded)

TVA Press Release of October 2, 1934

Text of an Address Delivered Before the Technical Club of Madison, Milwaukee Engineering Club and Other Groups, at Madison, Wisconsin, Monday Evening, October 1, 1934, by Arthur E. Morgan, Chairman of the Board, Tennessee Valley Authority.

The drainage area of the Tennessee River is about four-fifths as large as Wisconsin, and has about the same density of population. The Tennessee Valley Authority Act provides that the work of the Authority shall be in this drainage area and in adjoining areas in which the same issues and problems exist. So we are dealing with an area somewhat larger than Wisconsin.

The lands drained by the Tennessee River have a much greater range of physical, social and economic character-

COMPLAINANTS' EXHIBIT No. 883 (Excluded)

istics than does Wisconsin. At the headwaters of the river in North Carolina and Tennessee, there are mountain valleys three thousand feet above sea level; while low water at the mouth of the river is only about three hundred feet above sea level. With more than two thousand feet of fall in its streams, and with a rainfall about double that of [fol. 3868] Wisconsin, the possibilities for water power development are very great.

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In three respects the Tennessee Valley Authority law is specific and definite. The power development at Muscle Shoals, lying idle for years through the obstruction of private power companies, must be put to work. The private power companies had been using this great plant as a standby plant, letting the power run to waste when they had plenty of their own, and using it as an emergency supply when they were short. Such use of power should bring the very highest wholesale price, yet they were paying for it less than a fifth of a cent per kilowatt hour, and were retailing it at three cities within ten miles at more than thirty times as much. In this way the private power companies were receiving a subsidy of millions of dollars from the Government. No wonder they were deeply grieved and shocked at the proposal to discontinue the arrangement.

The Tennessee Valley Authority Act directed the Authority to operate this plant, to build transmission lines, and to sell the power. The Authority has adopted a comprehensive power policy. To make a fair comparison between public and private operation, it is essential that the area served [fol. 3869] shall be comparable to that of a well-proportioned private utility system. It must sell electric power in this territory or give up its entire power program, and give up any opportunity to compare the effectiveness of public and private operation.

The Authority has determined, if possible, to buy existing facilities at fair prices, and though hundreds of communities have asked for its service, and a considerable number have voted to buy power from the Authority, yet not a single competitive line has been built. Negotiations with

COMPLAINANTS' EXHIBIT No. 863 (Excluded)

private companies have been entered into in good faith, and contracts have been made for the purchase of transmission and distribution facilities. In case of the purchase of the Knoxville power system, some very unfair and misleading criticism has been leveled at the Authority. The critics have not told the public that the utility company involved, at one stroke of the pen, increased its capitalization from \$12,000,000 to \$17,000,000 without adding one cent to its actual properties. Neither did these critics disclose the fact that the utility company had been using high power rates to pay eight per cent dividends on an almost obsolete street car system which was not even paying its operating expenses. Over half the capitalization of the company was made up of water and of a non-pro-[fol. 3870] ductive street car system. The price offered by the Tennessee Valley Authority and accepted by the company is full payment of all the actual useful investment.

The Authority holds that power use would greatly increase if rates were lower. The community which has been served longest by the Tennessee Valley Authority is Tupelo, Mississippi. The Authority is selling power at wholesale to this city at about half the former rates. The city, in turn, is retailing the power at about half the old rates. Domestic consumers now pay three cents for the first fifty kilowatt hours, two cents for the next hundred kilowatt hours, one cent for the next two hundred, and four-tenths of a cent for everything thereafter. Under these new rates, the use of power has doubled in less than a year, and is still increasing. The city is meeting all charges for operation, maintenance, depreciation, repayment of capital and taxes, and is building up a substantial reserve. The Authority holds that there is no over-production of electric power, but rather a great under consumption, which can be overcome by lower rates and by lower prices on electrical equipment. The Authority is undertaking to conduct its power business as a self-sustaining project which will [fol. 3871] amortize its capital and pay its full share of taxes.

To promote the wider use of electric equipment the Authority organized the Electric Home and Farm Authority in order to make available low priced electric appliances. When manufacturers will reduce the price of appliances

COMPLAINANTS' EXHIBIT No. 883 (Excluded)

and power companies will reduce the price of power, the Electric Home and Farm Authority will help finance sales. Under this program the price of appliances is being greatly reduced, and the sales greatly stimulated. These appliances are handled through the regular retail outlets.

Not all interests approve the electric program of the Authority. The coal interests and the ice interests have united in legal suits in Federal and State courts in an effort to block the program. The coal men fear water power will infringe on the use of coal, and the ice men fear the increase of electric refrigeration.

The electric power program is being directed by Mr. Lilienthal, formerly of the Wisconsin Utilities Commission.

A second specific provision of the Tennessee Valley Authority Act provides for the construction of additional dams and for the increase of power resources. Two great [fol. 3872] dams are now under construction—Norris Dam on Clinch River and Wheeler Dam on the Tennessee River. . . .

Below the Norris Dam there will be about ten dams on the main Tennessee River. The Tennessee varies greatly in flow between dry summers and wet winters, and the Norris Dam will so regulate the flow as to more than double the prime power at each of these dams.

By developing the water power of the Tennessee River as a single great coordinated system, storing water in a series of headwater dams during the rainy season and releasing it to the dams down below during the dry season, power can be developed at far less expense than by independent projects, and at the same time the interests of flood control and navigation can be promoted. Only the Government can properly carry on so far-flung an undertaking.

Private companies are saying that water power cannot compete with coal and that there is a great over-production of power; yet at this moment well financed private interests are spending substantial sums for new water power plants in this area, in an effort to circumvent the TVA and to keep the power possibilities for themselves. Their actions speak louder than words. It falls to my lot to have charge of the development of this power, navigation, and flood control development.

[fol. 3873] COMPLAINANTS' EXHIBIT No. 884 (Excluded)

TVA Press Release of October 6, 1934

Statement Filed by the Tennessee Valley Authority With
the Alabama Public Service Commission

Knoxville, Tennessee, October 6, 1934.

Alabama Public Service Commission, Montgomery, Alabama.

GENTLEMEN:

In re Alabama Power Company, Petitioner, Docket 6636

The Authority has given most careful consideration to its position in the above entitled matter, and herewith informally submits its views to your commission.

Let us first summarize the facts, and state the issue.

The Alabama Power Company, a privately owned corporation operating for profit, has contracted to sell to the Tennessee Valley Authority, a governmental agency of the [fol. 3874] people of the United States, two groups of properties. The price in each case was reached after extended negotiation. Your Commission has already determined that the sale of the first group, which included transmission and distribution properties, is consistent with the public interest. This determination was made upon the facts submitted to you by the petitioning Alabama Power Company, and a brief statement by counsel for TVA. While the order of approval, based upon the finding of public interest, has been remanded by the Circuit Court, the Court's decision simply held that the notice was inadequate, and did not raise the issue which we are here discussing.

The question as to the second group of properties is the same as in the first; namely, whether it is consistent with the public interest that the Alabama Power Company sell certain of its properties. The two petitions are identical in principle; the distribution properties involved in the second petition are served from the transmission lines involved in the first, and all of these properties make but a single operating unit. In deciding the question of public interest on the first petition the Commission virtually considered all of these properties as a unit, although the order of approval was, of course, limited to the properties described in the peti-

COMPLAINANTS' EXHIBIT No. 884 (Excluded)

[fol. 3875] tion. Notwithstanding the substantial identity of the two petitions, in the second case, Docket 6-36, your Commission, in a series of communications to the Tennessee Valley Authority, and, as we are advised, in statements made in the record of the proceeding, has taken the position that it cannot determine whether the sale to the Tennessee Valley Authority is consistent with the public interest upon the same kind of showing as was made by the Power Company petitioner in the case of the first group of properties. It appears that your Commission has concluded that a showing by the Alabama Power Company with respect to this sale is inadequate as a basis for a finding by your Commission, although we are advised that the Commission has not yet heard the Power Company's testimony, and therefore presumably does not know the scope and nature of that testimony.

In the second group of properties, as distinguished from the first, the Tennessee Valley Authority, at the insistence of your Commission, has filed an elaborate statement of facts, in response to a questionnaire by the Commission's Chief Engineer. Your position is that neither a showing [fol. 3876] by the Alabama Power Company (which was regarded as adequate in the first group of properties) nor the elaborate statement of facts informally filed with you by the Authority is deemed adequate by your Commission to enable it to determine whether the public interest will permit an agency of the United States government to operate in the State of Alabama. In your communication of September 21 you state, among other things, that it will be necessary that there appear before your Commission as witnesses some seven executives, officers and staff members of TVA to testify regarding the proposed sale of property. You state further that you desire the submission to you of the "final report" upon which the rates to be charged by the transferred properties were based, the supporting data pertaining to said report, and the individuals who were responsible for the report and the supporting data.

Your Commission would obviously not require testimony concerning the basis of Tennessee Valley Authority's rates if it did not consider that your Commission has jurisdiction

COMPLAINANTS' EXHIBIT No. 884 (Excluded)

to disapprove this sale because in your opinion these rates are not proper rates.

[fol. 3877] Your Commission would certainly not demand testimony unless it felt that that testimony was pertinent to a discharge of its duties. If your Commission did not consider that it had jurisdiction to refuse to permit TVA rates to be charged in the State of Alabama, it would surely not call for evidence respecting the basis of those rates.

Calling for this testimony would give the intervening petitioners (and their allies) a further opportunity to stir up ill will in other sections against the South and against the Authority's program, to permit them to use the Commission's hearing room as a sounding board for propaganda against the President's program in Alabama, or to permit a "fishing expedition" which might assist the intervenors in the litigation now pending in several courts. The Authority believes that the Alabama Public Service Commission would not lend itself to such subversion of its functions. The Authority believes that the Commission's reason for calling for this testimony is its conviction that, having this testimony, it has jurisdiction to impose its views as to rates upon an agency of the United States: and this presents a fundamental issue of far-reaching implications which must be faced.

[fol. 3878] In a recent decision your Commission held that the Tennessee Valley Authority, as to its operations within the State of Alabama, is in a position of any public utility operated for profit, and therefore subject to comprehensive regulation by your body. The assumption that your Commission has jurisdiction to hold that the rates to be charged by the Tennessee Valley Authority are too low, and that therefore you may effectively bar the Tennessee Valley Authority from operations within the State of Alabama, is an inextricable part of your conclusion that the TVA is a public utility subject to regulation by your Commission. With all respect, the Tennessee Valley Authority disagrees with this conclusion, not merely as a matter of law, but as a matter of the basic policies of the program of the President and the Congress.

And since your Commission cannot directly determine the rates and rate policies of this national agency, it should not

COMPLAINANTS' EXHIBIT No. 884 (Excluded)

try to do this indirectly, by calling for testimony concerning matters clearly beyond your control. To illustrate why Tennessee Valley Authority objects to the line of inquiry you propose to follow if our witnesses appear, let us take [fol. 3879] a few concrete situations. Let us suppose that the Commission, after reviewing the evidence which it has called for from the Authority, should decide that the Authority's rates were too high or too low, and should approve the sale on condition that the Authority increase or reduce these rates. Or suppose that the Commission should similarly hold that TVA rates for farm use should not be substantially as low as in towns, despite the mandate of Congress expressed in the Tennessee Valley Authority Act concerning rural electrification and agricultural development. The policies as to rates which govern the Tennessee Valley Authority are those derived from the Act of Congress. For the directors of the Authority to permit these policies to be changed or effected by the orders of your Commission would be a violation of our oath of office. In matters of rates, as in all other matters, the Authority cannot have two sources of authority.

Or suppose that your Commission, after a study of the Authority's books, records and accounting methods, which are covered in your letter of September 21, should come to the conclusion that our books and records were not kept in accordance with the Commission's standards and that, for [fol. 3880] purposes of uniformity or otherwise, it should condition its order of approval on our adoption of the Commission's standard accounting classifications. The Tennessee Valley Authority Act specifically provides that the Comptroller General of the United States shall audit our books and records and report to Congress. The Authority would here again be faced with a conflict of authority between your Commission and the Congress of the United States.

In view of your extended opinion of July 14, holding that the Authority is a mere public utility and as such subject to your control in every particular, there is considerable reason for believing that we must give serious consideration to the possibility that through this very proceeding, involving merely the transfer and sale of property, you will

COMPLAINANTS' EXHIBIT No. 884 (Excluded)

seek, by the attachment of conditions, to exercise jurisdiction over all the Authority's operation in Alabama. Your action in calling our rate policies into question certainly gives support to this belief.

The Tennessee Valley Authority is at this moment and has for some weeks been ready to the last detail to take over and operate the properties now owned by the Alabama [fol. 3881] Power Company involved in these proceedings. Its Board of Directors has appropriated approximately one million dollars to be expended immediately in the rehabilitation and extension of these properties. The Authority has set aside substantial sums for the construction of a network of lines to farms not now served. The Authority has a considerable staff of technical experts at work on plans designed to stimulate industrial development throughout Alabama. A new construction project which will put thousands of men at work in Alabama within a few weeks, and which will continue for several years is ready for final approval of this Board. The Authority has plans well under way, and has expended substantial sums, looking toward small-scale industry in conjunction with agriculture within the State of Alabama. Certain communities in Alabama have officially expressed their desires with respect to this program, and have approved the TVA plans. The people in the affected area are cooperating, through their own agencies, in this program in a spirit which is most heartening. A delay of even a few weeks in moving forward with this program at this critical time in the history of the South we feel would be most unfortunate. But the Tennessee Valley [fol. 3882] Authority can not begin this complete program in the State of Alabama if it must do so at the sacrifice of a fundamental principle, the principle that this is a national project; that it is subject only to a single authority; the will of the people of the entire country.

The Authority has already submitted to you a statement giving in considerable detail particulars on the following matters, among others:

1. The Authority's wholesale and resale rates;
2. The Authority's form of power contract with municipalities;

COMPLAINANTS' EXHIBIT No. 884 (Excluded)

3. The Authority's rules and regulations;
4. The Authority's plans for the ultimate disposition of the properties;
5. The Authority's plans for rehabilitation of the existing facilities;
6. The Authority's plans for the construction of additional rural extensions;
7. A comparison of existing rates with the rates which will be charged by the Authority upon approval of the petition.
8. An allocation of the purchase price among the various distribution systems.

You have asked, in your letter of September 29, "if the [fol. 3883] Authority may be expected by the Commission to aid in the hearing" of these causes, "and if so, to what extent you propose to aid in the hearing of these causes. . . .". The following specific suggestions are offered for your consideration, and we believe indicate a method whereby both your responsibility and our responsibility may be satisfied:

1. Under an agreement that jurisdiction will not be conferred thereby, the Authority will have present at the scheduled hearings, the witnesses requested by you, or any others you may designate.
2. The appropriate witnesses will, if the Commission desires, verify the extended information contained in the statement filed by the Authority the contents of which are listed above, and will testify, if the Commission so desires, on the technical and financial resources of the Authority.
3. The Authority will have counsel present who will seek to aid the Commission with respect to legal questions involved in the petition.
4. This participation would be conditioned upon the understanding that all matters pertaining to rates and rate policies, and accounting are for the sole determination of [fol. 3884] Congress and its agents, and, therefore, not a

'COMPLAINANTS' EXHIBIT No. 884 (Excluded)

proper subject for examination or cross-examination in these proceedings. It is a matter of public record, which can be filed with you, that these same rates and rate policies have successfully worked out in practice under closely comparable conditions in a substantial area in Northeast Mississippi and in the City of Athens, Alabama.

We suggest that the foregoing plan provides a means whereby your Commission can secure the fullest information, and yet not involve the proceedings in matters over which your Commission has no direct Jurisdiction, and should not seek to exercise indirect control.

We have sought to approach this matter throughout in a spirit of cooperation, in an effort to find some reasonable means whereby your wishes can be complied with which at the same time will permit us to meet our responsibilities as we see them.

We await your views on this matter in the hope that the foregoing suggestions will be acceptable to you and will permit these proceedings to be concluded at an early date.

[fol. 3885] Very truly yours, Tennessee Valley Authority, — — —, Chairman; — — —, Director; — — —, Director.

[fol. 3886] COMPLAINANTS' EXHIBIT No. 885 (Excluded)

TVA Press Release of October 8, 1934

Muscle Shoals power was supplied to a system of approximately seventy miles of rural electrification lines in Lauderdale County, Ala., yesterday when Fred J. Freestone, trustee of the Power Authority of the State of New York, and a prominent farmer in central New York, threw the switch at a rural substation about two miles northeast of the Wilson Dam, which connects this system with the generators at the Wilson Dam power plant.

This system comprises a rural electrification project, which is wholly owned by the Tennessee Valley Authority and which serves a territory which never before has been supplied with electric power. Along the lines are ap-

COMPLAINANTS' EXHIBIT No. 885 (Excluded)

proximately 300 farms and 100 residences in small communities, which have indicated that they wish to receive service from these lines.

Included in the territory are the towns of Waterloo, St. Florian, Oakland, Wright, Gravelly Springs, Center High and Green Hill. One line extends out some distance along the Florence-Savannah Road.

The opening of these lines for service is in accord with the plan outlined last July by David E. Lilienthal, director of the Tennessee Valley Authority in charge of power [fol. 3887] development, for the electrification of north Alabama. Under that plan the systems which would be taken over from the Alabama Power Co., and the new lines and extensions which the Tennessee Valley Authority would construct, would be operated by the Tennessee Valley Authority until such times as the municipalities concerned could take them over. Meanwhile, in addition to the regular TVA resale rates for power, customers would pay a surcharge of ten per cent, which in turn would be applied against the cost of the systems to the municipalities.

The energizing of this rural system was a feature of the visit of the Chairman and Trustees of the New York Power Authority to the Tennessee Valley Authority's projects at Muscle Shoals. . . .

The members of the New York Power Authority are touring the Tennessee Valley with the view of studying the TVA's policies and achievements in bringing about lower electric rates and larger domestic and rural use of electricity; the effect of public distribution within cities and villages upon the cost of electricity to small consumers in the surrounding rural areas; extension of rural distribution lines; decentralization of industry; and agricultural problems and the relation of public electricity to those problems.

[fol. 3888] COMPLAINANTS' EXHIBIT No. 886 (Excluded)

TVA Press Release of October 9, 1934

Statement by David E. Lilienthal, Director of The Tennessee Valley Authority in Charge of Power, Upon the Conclusion of Visit to Tennessee Valley of the Trustees of the New York Power Authority

I was particularly struck in talking with Chairman Walsh and his fellow Trustees these past few days, by the similarity of the problems and of the point of view of these two Authorities in their job of developing abundant electricity and distributing it at the lowest possible rates. For one thing, we seemed agreed that electricity, if people are permitted to use it as liberally as they should and can, will largely influence the economic and social life of the country in the coming decade. Then too, as trustees of public property of great value, our New York colleagues and ourselves are both under a duty to consider ahead of any other consideration the good of the entire community in the development of great natural resources. In the St. Lawrence "yardstick" area and in the Tennessee Valley "Yardstick" area, we are both working toward the same end; To find economic ways and means for an ever wider use of electricity in homes, on farms and in industry.

[fol. 3889] COMPLAINANTS' EXHIBIT No. 887 (Excluded)

TVA Press Release of October 22, 1934

An Address Delivered Before a Joint Meeting of the National Conference on City Planning and American Civic Association, October 22, 1934 at St. Louis, Mo.

"Large Scale Regional Development" by E. S. Draper, Director of Land Planning and Housing, Tennessee Valley Authority

In the planning of a large region, which is the subject of this discussion and one which means the cutting across political lines, county and state, there is bound to be a lack of political implementation using the term in its right sense, on account of the fact that the American political

COMPLAINANTS' EXHIBIT No. 887 (Excluded)

system has constitutionally given the rights of administration in a large measure to the agencies of town, city, county and state. . . .

I would question whether any such regional agency could be successful, unless its set-up was such that an integral part of its activities were intimately and actively associated with the social and economic development of the region. . . .

[fol. 3890] I believe the most successful method is the basis on which the Tennessee Valley Authority has been set up, whereby the whole program grows out of the development of natural resources for which it has the funds and the authority and is able to cut through state lines in proceeding with such developments.

The planning of a large region cutting across state lines in seven states in the geographic region of the Tennessee River watershed involves more than the 42,000 square miles within the Valley. Fortunately the Act gives the right to plan beyond the geographic boundaries in such instances as the welfare of the region itself is affected.

In connection with power, I interpret that to mean that wherever power can be transmitted from generating plants along the Tennessee River or its tributaries and the distance to which that power can be effectively transmitted, therein lies the area or region within the influence of our planning activity. It would certainly seem short sighted to send power from Muscle Shoals to Birmingham, Alabama, from Pickwick Dam to Little Rock, Arkansas, from Aurora Dam to St. Louis or Terre Haute, or from Norris Dam to [fol. 3891] Asheville or Cincinnati, without giving consideration to the relationship of such power transmission to the country transversed by the lines and the effects in the way of industrial activity, population changes and transportation and communication adjustments.

So, any regional program must contemplate effects outside of the region itself as a part of its planning procedure. I would question the chances for success of TVA if it did not have as a part of its program the development of great dams and reservoirs for flood control, navigation and electric power. It is hard to imagine a more compelling relationship to the lives and activity of the people than that which may result from providing greatly increased electric

COMPLAINANTS' EXHIBIT No. 887 (Excluded)

power, the use of which will change and alter the daily habits of millions of people. . . .

In the TVA we have an agency in which planning goes hand in hand with the basic development or extraction of natural resources. During the seventeen months that I have been connected with this undertaking I have had a gradually increasing respect for the power which planning [fol. 3892] may be able to exert in such a situation and the opportunity which exists for implementation.

I believe that there is a definite place in American planning for nonpartisan governmental agencies concerned with the planning of large regions and cutting through state lines. I feel that the planning work of such agencies should be related to a basic governmental program, and, if so related, the planning results from the work of such an agency can be made more effective and more beneficial than planning that is not so much implemented for its execution.

In England the effect of power transmission through the so-called grid system, whereby the distribution lines are under the control of the government whether the power generating plants are private or public, has brought the planners to the realization that this is perhaps the most important development necessitating regional rather than local planning that has ever come about in this country. The question uppermost in the minds of English planners today seems to be: How can we tie together the work of many local [fol. 3893] planning agencies so that the regions which have been established for power distribution can be made truly effective from a planning standpoint, if power is to be the motivating force of a new area of civilization, as many thoughtful men predict? Then it should and must be guided by the best planning thought, cutting across State lines and relating to great regions.

To achieve the ultimate of the TVA Act, we must seek not solely the production of cheap power, or low cost fertilizer or any of the other desirable results of our varied program, but through wise Planning to ensure these instruments of a better regional economy reaching into the lives of all the people in such a way as to benefit all who live in the region and those outside within the scope of influence.

COMPLAINANTS' EXHIBIT No. 888 (Excluded)

[fol. 3894] COMPLAINANTS' EXHIBIT No. 888 (Excluded)

TVA Press Release of November 7, 1934

Norris Dam, the Tennessee Valley Authority's first major project in its Valley program, is one year old today. . . .

A Power policy has been formulated and the power "yardstick" defined. Wholesale and resale rates have been fixed, and arrangements have been made to serve more than 50 municipalities at greatly reduced rates. The nucleus of a TVA power system has been established through the purchase of transmission and distribution facilities. More than a hundred miles of rural transmission lines have already been pushed out into territory hitherto not served with electric power. Wilson Dam itself is turning out TVA kilowatts at rates that take electricity out of the luxury class of commodity. It is estimated that great savings will be made annually by consumers served by other power utilities in the Valley states through substantial rate reductions. Further, the Electric Home and Farm Authority has been set up by the TVA as an agency that is making it possible for housewives to obtain through regular dealer channels electric ranges, refrigerators, and water heaters [fol. 3895] at prices from 25 to 35 per cent lower than those heretofore prevailing. The EHFA is cooperating with manufacturers and utilities to encourage the wider use of electricity in homes and on farms.

And the work of the Tennessee Valley Authority has really just started.

[fol. 3896] COMPLAINANTS' EXHIBIT No. 889 (Excluded)

TVA Press Release of October 26, 1934

Attacks by the coal industry on the Tennessee Valley development and other Federal hydro-electric projects were yesterday met with a proposal by the Tennessee Valley Authority that the industry and the TVA mutually arrange an unbiased investigation of the respective costs of water power and coal energy.

In a personal appearance before the Bituminous Coal Research Division of the National Coal Association, in con-

COMPLAINANTS' EXHIBIT No. 889 (Excluded)

vention at Washington, TVA Chairman Arthur E. Morgan reiterated the Authority's desire to cooperate with the industry in developing new uses for coal, including a smokeless fuel, adding:

"The coal industry has seen fit to oppose the plans of the Tennessee Valley Authority on several counts. First, that electric power generated by water power will use less labor than power generated by steam through the use of coal. The coal industry and the electric power industry can not claim that inefficient methods should continue in order to provide labor. The coal industry has done its utmost to improve mining methods by the introduction of labor-saving machinery. As a result, many thousands of coal miners have been thrown out of work. This policy of eliminating [fol. 3897] labor as far as possible is a settled policy of the coal industry within itself, and the coal industry can not object if the general public adopts the policy of the most economical and efficient methods of meeting its power needs.

"Moreover, during the present period of unemployment, the building of Norris Dam and Wheeler Dam is giving employment to nearly 10,000 men, and until these dams are completed they are actually increasing the demand for coal. Moreover, low-priced power will so stimulate the manufacture of electrical appliances in all parts of America, and will so increase the use of electric power that employment will be substantially increased in the total, even in coal mining areas, with benefits far more widely distributed. The Tennessee Valley Authority has vigorously pursued the policy of endeavoring to stimulate self-sustaining employment in this region, and to insure that the total result of its activities shall be fewer unemployed persons and fewer persons dependent on Government appropriations.

"The National Coal Association also claims that electricity developed from coal is cheaper than electricity developed from water power. We have two comments to make on this [fol. 3898] claim. First, the private utility companies have no predilection for either coal or water power; yet their development has been very largely in water power, and today practically all the power being used in the Tennessee Valley area is water power. Practically all steam plants are idle.

COMPLAINANTS' EXHIBIT No. 889 (Excluded)

"The Tennessee Valley Authority would propose to the Coal industry that instead of a campaign of denunciation, the Tennessee Valley Authority and the coal industry unite in selecting a body of competent, disinterested investigators to make an impartial investigation covering the following points:

"1. The cost of electric power generated by the Wilson, Norris and Wheeler dams, with such standby steam plants or such additional water storage as may be economical. In this estimate, the war-time development at Muscle Shoals would be appraised at a fair present value and not at the total investment made under war-time conditions for military purposes.

"2. The actual cost of coal as mined within reasonable transmission distance of these dams, including indirect tax subsidies, if any, to the coal industry in the form of relief of underpaid or destitute mine workers and other forms of subsidy. This investigation should include the [fol. 3899] total actual cost of coal, including its social costs, due to anti-social working and living conditions, if any, within coal mining communities, and what the total cost would be if the coal miners were self-sustaining.

"3. The extent to which steam plants are paying less than the market prices for coal by means of buying "distressed" coal.

"4. The actual cost at present of generating power in the actual steam plants within transmission distance of the three dams mentioned; also what the cost would be of abandoning the present steam plants: paying off capitalization, and building new and modern steam plants in accordance with the best modern practice.

"5. The cost of meeting additional requirements for power in this region by the construction of additional steam plants of modern design; and the comparison of this cost with the cost of hydro-electric power generated at the three dams mentioned."

Chairman Morgan declared that the TVA has carried on research for more than a year in an endeavor to pro-

COMPLAINANTS' EXHIBIT No. 889 (Excluded)

mote the welfare of the coal industry as part of the Tennessee Valley Authority program.

[fol. 3900] COMPLAINANTS' EXHIBIT No. 890 (Excluded)

TVA Press Release of November 19, 1934

The TVA Directors today concluded an arrangement with the Southern Industries and Utilities Company, for the evaluation of this company's property on the lower Tennessee near what is known as the Aurora Landing dam site. The valuation is to be made by the Federal Power Commission, before whom the Southern Industries and Utilities Company has pending an application for license to construct a power dam and which has heretofore been granted a preliminary permit. TVA will acquire the company's property on the basis of this valuation, which is to represent actual legitimate costs as determinable under the Federal Water Power Act.

Carl A. Bock, Assistant Chief Engineer, says TVA has since its organization steadily been pushing investigations on the lower Tennessee toward the development of a suitable project which will provide the greatest economic value to the Valley, and these plans are more comprehensive and more advanced than the plans heretofore made by any other agency.

[fol. 3901] On account of the very large problems, the large cost, and the important considerations involved in the treatment of the lower river, plans must be worked out with unusual care in order to avoid large waste through hasty or ill-considered construction. Surveys and investigations are progressing as rapidly as possible, but it will require some time to develop final plans.

Some years ago Southern Industries and Utilities Company, a Maryland Corporation, procured a preliminary permit from the Federal Power Commission to engage in work preliminary to the construction of a dam. Two months after the creation of the TVA the company applied to the Commission for a license. The Authority entered a protest to the granting of this license, taking the position that the proposal interfered with the unified development

COMPLAINANTS' EXHIBIT No. 890 (Excluded)

of the river for the best public interest. The company relied for the major portion of its financing on an appropriation from the Federal Congress, on account of the Government's interest in navigation. This appropriation had not been secured and the whole proposal was left in an indefinite state.

In the meantime the publicity given to the company's proposal had caused the general public impression that [fol. 3902] final plans and appropriations had been completed and that construction could start at once. This is not the case, and the present action of the TVA Board is intended to clarify the status of the project in the public mind, as well as to permit the Federal Power Commission to dispose of the application for license which is still pending before it. TVA recognizes only the right of the company to compensation for property, but does not recognize any promotional costs or so-called water rights in the situation. The pending application of the company for a license created a special situation which needed clarification.

[fol. 3903] COMPLAINANTS' EXHIBIT No. 891 (Excluded)

TVA Press Release of December 17, 1934

Address Delivered by Dr. Arthur E. Morgan at the Wharton School, University of Pennsylvania, Philadelphia, on December 17, 1934

Certain other phases of the program are in full glare of publicity and of controversy, notably the issue of electric power. The TVA inherited this issue with Muscle Shoals, but it is not an unwelcome inheritance. In the new adjustment of agriculture and industry which must be a feature of wholesome economy in this region, and in a higher level of domestic economy, abundant and cheap electric power will be a most potent factor.

We believe that when the TVA was organized and its power policy was established, the prevailing rates for domestic power were about twice as high as were necessary

COMPLAINANTS' EXHIBIT No. 891 (Excluded)

to meet all proper charges on necessary and reasonable investment. The power companies of the region headed up in a few great holding companies in New York. In recent years, electric power has been one of the richest sources of corporate income, and the powers that be are loath to see this domain infringed upon. The TVA holds that the advantages of electric power, beyond proper cost of financing and operation, should accrue to the people of the region where the power is generated and used. For a generation our railroads were stakes in a game played by high finance, rather than primarily a service to the people. Electric power should not repeat that history. With the coming of the TVA and of the present national administration and certain new state administrations, the power companies have made sudden and great reductions in rates. The following sentence is quoted from a recent advertisement of the Georgia Power Company:

"Minimum bill customers will continue to pay \$1.00 a month. But the dollar now will buy 15 kilowatt hours, instead of 5 as was the case under the old rates. That's a reduction in price of electricity to such customers from 20 cents to approximately 6½ cents a kilowatt hour." Those are the words of the company. They describe an extreme case. For the average household the cut in residential rates was about 35 per cent. In the opinion of the TVA these rates are still too high, and are still placing the Tennessee Valley under unnecessary tribute.

But there is another reason why the public should be [fol. 3905] interested in the generation and distribution of surplus electric power. The Tennessee is a great river system, draining more than 40,000 square miles. It has great power possibilities, which can be developed along with flood control and navigation. If power developments on the Tennessee are by unrelated projects there will be great loss of economy and efficiency. Power plants on the main river have great capacity during high water, but lack storage possibilities for regulating the river. On the up-river branches there is great storage capacity. By uniting this entire river system into a single integrated system, to provide navigation flood control and power, electric power can be produced far more cheaply. This is planning

COMPLAINANTS' EXHIBIT No. 891 (Excluded)

and integration on a far greater scale than has heretofore been accomplished. Treated as a unit, the four great dams built or under construction by the TVA can bring about a far higher quality of navigation, and can produce power at a much lower cost than the most modern steam plant. Moreover, all the processes of construction and operation of the TVA water power system are with well-paid labor under modern wholesome working conditions, in striking [fol. 3906] contrast to conditions in much of the coal industry. It would seem a pity for the country to suffer the essential social loss which would come from unintegrated, haphazard development. . . .

Briefly, the power policy of the TVA is as follows:

The business of supplying power is not a private business, but concerns the public interest. It cannot be carried on effectively except by the exercise of governmental functions, such as the right to take private property for public use, and the right to maintain monopolies. The public may exercise these rights directly through the government, or may grant them to semi-private agencies. It is for the people to decide which course shall be taken.

Congress has established the policy of public generation and sale of surplus power in the Tennessee Valley region. Unless this act should be found unconstitutional, it constitutes a formulation of public policy. The TVA is authorized to acquire existing properties or to construct competing facilities. Many cities in the region have formally requested the TVA to supply them with power. To date, [fol. 3907] not a single mile of competing line has been built, though it may become necessary to do so if a policy of continual obstruction is continued. It has been the policy of the TVA to buy existing properties at a fair price rather than to build competing properties. It has offered to pay the fair actual value of such properties but has refused to pay for inflated capitalization. Where capital inflation has been extreme, there may be a marked difference between what the TVA will offer, and the total capitalization. It is the policy of the TVA, in calculating the cost of power, to include every legitimate cost including operation, depreciation interest, taxes, and amortization. Taxes are estimated to equal those paid by the private utilities. It is interesting to note that most private utilities do not

COMPLAINANTS' EXHIBIT No. 891 (Excluded)

provide for amortization. The program of legal entanglements being thrown about the power program of the TVA—There were several actions pending when I received the last returns—may serve to delay effective action and for a time support the claim that the government cannot be effective in business. The loss caused to the TVA and to the public by these obstructive actions may run into millions of dollars.

[fol. 3908] It is the aim of the Tennessee Valley Authority to develop the water resources of the Tennessee River system by a single coordinated system, and to sell its surplus electricity to municipalities and other users at rates that would pay all legitimate costs, including taxes. We believe that there is no over-production of power, and that lower rates will lead to such great increases that new facilities will very soon be necessary. Where TVA rates have been in effect, the use of power has doubled in less than a year.

[fol. 3909] COMPLAINANTS' EXHIBIT No. 892 (Excluded)

TVA Press Release of November 5, 1934

Address in Philadelphia, Pa., Given by Dr. Arthur E. Morgan, Before the Democratic Womens Luncheon Club, November 5, 1934

That was largely the burden of the President's mind in establishing the Tennessee Valley Authority. In the minds of Congress, another thought was dominant. During the World War, a great power plant was built on the Tennessee River at Muscle Shoals, the Wilson Dam and power plant. Twice, Congress had passed bills providing for government ownership and operation of that power plant. Twice such bills had been vetoed, by Coolidge and by Hoover. The temper of the American people was fairly well made up on that point.

In his campaign speeches, President Roosevelt expressed himself this way. He said he did not approve the taking over of the power resources of America by the government. He said he did approve, however, of a limited number of

COMPLAINANTS' EXHIBIT No. 892 (Excluded)

projects which he called yardsticks of government ownership [fol. 3910] ship and operation, where it might be possible to make a fair comparison of government ownership and operation and of private ownership and operation.

The Tennessee River is an excellent case, for two or three reasons. First, the government already owned a great power plant there. Then there is another reason that is even more compelling. The Tennessee River has a drainage area of 42,000 square miles, just about the size of the State of Ohio. If the power on that river is developed independently a project here and a project there, probably a third of its potentialities would be lost.

Let me illustrate. The Wilson Dam at Muscle Shoals has only a relatively small capacity for prime power, as they call it, that is, dependable power the year round, because the river varies greatly in its flow. A year ago last summer, during a dry season, there was only water enough in the river to produce 25,000 kilowatts of energy. A year or two before, in the winter time, there was water enough to produce 600,000 kilowatts of energy, a range of about twenty-five to one. On the other hand, up on one of the branch streams we are building the Norris Dam and reservoir, a reservoir larger than any now existing in the United [fol. 3911] States, big enough to hold the entire flow of the river above for a year at a time. The Norris Dam, taken by itself, might not be profitable, because if you spread that flow throughout the whole year, the energy might not be worth the cost. But suppose you take the Norris Dam and the Wilson Dam at Muscle Shoals together, what do you get? For about eight or nine months in the year, there is an abundant flow in the Tennessee River, and then for two or three months there is a low flow. Now, if you use the up river power plant to store water when there is abundance below, and to let it out during the one or two or three months when there is low water below, you can bring up the flow in the lower river so that instead of having 25,000 kilowatts capacity, it will have 150,000 kilowatts capacity. You can fill up those low periods, and you can make the Wilson Dam worth very much more than it would be worth alone. So that neither of these projects is fully valuable by itself, but taken together, they produce some of the cheapest hydro-electric power in America.

COMPLAINANTS' EXHIBIT No. 892 (Excluded)

Those are just two cases. Below Norris Dam there are places for about eight or ten power plants along the Tennessee River. There is very little storage at any of those. [fol. 3912] By building the Norris Dam up river, you can more than double the value of each of the eight or ten down river. By building additional dams up river, you can further increase the value of every one down river. Taken independently, those power plants are of doubtful merit. Taken together, they produce one of the most economical power developments on the American continent.

Now, there is a place where the facts of the case indicate the need of social and economic planning. . . .

This principle of a yardstick of a comparison, has been established by Congress. If we are to have a case of public ownership and operation, it must be somewhere, it can't be up in the air. Now, while those who are interested in preventing the government from having such a case, were preventing the use of Wilson Dam at Muscle Shoals, they were surrounding that area with their private transmission lines. They were putting in their investments in that area, and they were selling securities to widows and orphans in that region. I recently saw about one hundred and fifty letters that had been written to the President, protesting against the government development of this power, and it happened that a large part of those were from widows and [fol. 3913] orphans. Whether there was an effort to sell them for publicity purposes, I don't know, but perhaps a car-catalogue is kept of widow and orphan investors which can be used at the right moment.

Now, if we are going to have a case of public ownership, it must be somewhere; we must take an area. That area must be on a large enough scale to be comparable with other power developments. It can't be a little corner that is too small to be efficient. A natural unit of production is the Tennessee River watershed. Nature has made that a unit. The natural unit of consumption is an area that would use that power.

The policy of the Tennessee Valley Authority is this: to develop power as cheaply as it can be actually developed, paying good wages and meeting all actual costs, and to purchase from the private companies an area large enough to

COMPLAINANTS' EXHIBIT No. 892 (Excluded)

distribute that power. The law provides that we can build competing lines against private companies. . . .

We believe the power companies are in their own light in keeping their rates so high that the public can not make use of power. So we have set a price for power which we believe will pay all the proper costs—taxes, amortization, interest—[fol. 3914] est—all proper costs, but no more.

Now we have taken over a few towns. There is a campaign put on by those who try to prevent us from establishing a yardstick, that is obstructing the program. I believe it would be a fairer deal if they would cooperate with us and say, "You take that property, buy it from us at a fair price, and see which is better." It seems to me that if the private utilities are so certain that they are more competent, more efficient, they would welcome a chance to have a comparison. So we have invited them to cooperate with us. We would like to have them be acquainted with our books and our records in every way to see just how it turns out when you have this comparison.

At Tupelo, Mississippi, we have been furnishing power for about eight or nine months at about half the rate charged before. During that time, the use of power in that town has more than doubled. Those people are buying electric appliances. In those eight or nine months, they have bought more appliances than they had bought in all the history of the town before. Other towns are following, and the factory towns of the North are prospering by making the equipment that is being sold.

I believe that the power policy of the Tennessee Valley [fol. 3915] Authority is a sound policy, that it will reflect to the advantage of the private utilities and of the public utilities. One of the large private utilities that we are competing with has lowered its rates, not as much as ours, but about 30%. The increase of power sold has been so great that its income was greater than it was before it lowered rates. . . .

At the same time, we have been developing an electric utility system. Just as there is difference in State administrations, some good and some bad. In utility administration there has been a watering of stock, there has been a corrupting of legislators, there has been a corrupting of public utility administrators. Sometimes the lid blows

COMPLAINANTS' EXHIBIT No. 892 (Excluded)

off as it did in the Insull case. I doubt whether the Insull system was the only great national system run in an unsound manner. • • •

We have been buying certain utility properties in the Tennessee Valley. A great deal has been said about our purchase of the Knoxville system. There are certain things that are not advertised to the public. For instance, at a time when the Tennessee Public Service Company, owning the Knoxville system, had a capitalization of \$12,000,000, its [fol. 3916] directors sat down one day and wrote \$4,500,000 of water into that capitalization, added approximately 30% to its capitalization over night, without adding one cent to its valuation. We are refusing to buy that water in buying that property.

Again, that company owns a street car system in Knoxville. Those of you who know public utilities know that a street car system in a town of 100,000 isn't always worth a great deal. That street car system has not been paying its actual monthly running expenses, to say nothing about interest on bonds, or dividends on stock. Yet the people have been charged enough for electric light to pay interest on the actual investment, interest on all this water, and interest on the street car system.

Now, prudent financial management would have stopped paying dividends on that street car system and would have begun to amortize the capital, knowing it was a dying system. That was not done. In buying these systems, we have tried to offer a fair, honest price for the actual values, that much and no more, and I believe those facts ought to be brought out in public discussion.

[fol. 3917] COMPLAINANTS' EXHIBIT No. 893 (Excluded)

TVA Press Release of January 16, 1935

The Tennessee Valley Authority announced today that its Birmingham office will be opened Friday, January 18. The office, which occupies the first floor of the building at 1916 First Avenue, will be under the supervision of Mrs. Pattie R. Jacobs of Birmingham, who recently left NRA to accept this position with the Authority.

COMPLAINANTS' EXHIBIT No. 893 (Excluded)

It was announced at the same time that Miss Willie L. Byrd, also of Birmingham, has been employed as secretary to Mrs. Jacobs. Mrs. Jacobs will also be assisted by Claude Manning of the TVA.

The first floor of the building has been remodeled and an educational exhibit installed. In addition to having a regular staff of three, the office will serve TVA officials when in the Birmingham district.

The Authority now employs more than 6,400 persons in Alabama and its purchases in that state to date have totaled \$1,250,000. For the construction of Pickwick Landing Dam, the Authority will expend approximately \$1,000,000 in the Birmingham district for cement alone.

The educational exhibit in the fore part of the office consists of charts, maps and photographs which give a graphic explanation of many phases of TVA activities.

[fol. 3918] COMPLAINANTS' EXHIBIT No. 894 (Excluded)

TVA Press Release of May 13, 1935

Confidential Advance of Talk by Chairman Arthur E. Morgan, to be Given Before the Rotary Club of Columbus, Ohio, at Noon, Monday, May 13, 1935. For Release After 12 Noon, Monday

A private company could not afford to build Norris Dam, for it is not worth while of itself; the investment is too great for the power developed. It is profitable only because it will about double the prime power of all the dams down river. If these developments were in the hands of half a dozen companies, there would be no assurance to the company owning the Norris Dam and power plant that it would sell water it had stored. Owners of power plants down river could say "we do not need your stored water today," and would not use it except at unprofitable low prices. For years private industry had opportunity to build Norris Dam, and did not dare build it because there would be no assurance of cooperation with developments below. There is room ultimately for half a dozen or more great dams on the headwaters. These upriver dams need not only to be harmonized

COMPLAINANTS' EXHIBIT No. 894 (Excluded)

[fol. 3919] in their operation with the dams down river, but also with each other. A storm may fill one reservoir, while another is nearly empty. Only a single coordinated program can give full value at lowest cost. * * *

We are working on distribution of electric power. You have recently seen advertisements by the private power companies to the effect that the American people spend only one per cent of their income for electricity. That is a situation to be ashamed of, not to boast about. Americans should spend more than five per cent of their income for electric power. They would if it were cheap enough. At the Norris Dam we built one hundred and fifty houses properly equipped for electrical appliances, and we sell power at the low rates we think reasonable. Most of these are workmen's houses. We find the use of electric current in these small houses is about twenty times the average for American homes which are electrified. There is no surplus of electric power in America, only under-consumption. With reasonable rates, home use would double, and double again, and now industrial uses would add to our industries and to our prosperity. The Federal Power Commission reports a pending power shortage.

[fol. 3920] In my opinion, at the time the TVA was organized in 1933, of all the money paid for domestic power in America, only about half was a reasonable charge, and about half was unfair tribute taken from the people over and above a fair charge. Is it surprising that the little handful of men in control do not want to give up that source of financial power? Few Oriental monarchs ever had such tribute pouring in upon them. Since the organization of the TVA, power rates have been sharply reduced. In Cincinnati the reduction was more than a third. The president of the Commonwealth & Southern Corporation, which controls much of the South, testified before a committee of Congress that the TVA had forced their reductions. Before the same committee, the vice-president of the same organization testified that the TVA had nothing to do with it—that they would have reduced rates anyway. In our opinion there is still room for further reductions.

[fol. 3921] COMPLAINANTS' EXHIBIT No. 895 (Excluded)

TVA Press Release of July 31, 1935

Dr. Arthur E. Morgan's Talk

Chattanooga Flood Protection District Commission, et al.,
at Chamber of Commerce on July 31, 1935

One of the first things that confronted us at the formation of the Tennessee Valley Authority was the flood problems in Chattanooga. We have had that in mind and have been working with it ever since. Your problem here is not one that is going to be solved over night. Information necessary to determine upon a definite program doesn't as yet exist. We have some of it, we are getting more of it, but with such information as we have nobody can say "This is a program to be followed." Before a program can be adopted, there is necessary a large amount of information and an exactness of information that is gradually being developed.

I have been interested in flood control now for something [fol. 3922] over thirty years, and necessarily have been very much interested in estimates as to what kinds of floods, what size of floods, what frequency of floods should be taken into account. It may not do much good to prepare against floods, if the floods you are preparing against are going to be greatly exceeded. Sometimes work that is being done may be a menace instead of a help if it is inadequate.

In Europe, floods have been recorded over such long periods that people have been somewhat adjusted to their recurrence. Even there, they have floods that cost a good many millions of dollars. This country has been built up rapidly. Most of our development has come between flood periods and there are cities in America that have never experienced floods of anything like the maximum that is bound to strike them some day.

In 1921, when the great flood occurred in Pueblo, Colorado, New York City papers asked me as to the full significance that flood had for the rest of the country. I remarked that I could indicate at least one city in New York that was just waiting for its disastrous flood. I got a telegram next day from a certain city in that state. The editors wanted to know if I meant their city. It happened that they had developed a flood program of their own and had

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built some local works. The works they had constructed were inadequate and they had a feeling of security whereas there was no security at all. A few weeks ago, there was a large flood in northern New York. If that flood had shifted its location one hundred miles, that city would have been very greatly damaged. That New York State city is waiting for its catastrophe.

At Dayton, Ohio, in about 1909, they had a flood, a serious one, which did a good deal of damage. The people got together to work out a flood control plan. They got some "level-headed" engineers who weren't going to be spectacular about the job. They recommended "A good sensible degree of flood control," issued bonds to secure that flood control, let contracts, and started to work. A few weeks after they started to work, a flood came along two and a half times the size they planned against, and destroyed a hundred million dollars worth of property and drowned hundreds of people.

When one makes a study of flood possibilities and determines what degree of flooding can occur, it is then necessary to face the facts so that we shall know whether we can get full security, and that we are not assuming that we [fol. 3924] have something when we do not have it. I think that is one of the first necessities in handling flood control. I think that is necessary here in Chattanooga.

You have a very serious flood control problem. Your region has not been settled long enough to discover what the maximum flood possibilities are. My engineering firm, during the past twenty-five years, has tried to exhaust all available records concerning flood possibilities. We have searched every scrap of record we could find in this country, Europe and Asia. What is the biggest flood of the last ten years? Fifty years? One hundred years or two hundred years? We have gradually formed in our minds a judgment as to what is likely to be the biggest in fifty years, and what the biggest in one hundred years. We feel that we have probably as good judgment as can be arrived at because we have spent much time and effort. Surprisingly, there is but a limited amount to be learned by studying the records of storms over a great deal of this country. The records do not run back very far. Of course, in almost any country some of the people soon begin to make measure-

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ments on floods, but in recently settled countries it is difficult to get any good record that runs back very far. Even [fol. 3925] in the long-settled European countries, it is hard to find a river channel that has not changed its shape and size, one that has not changed its location from time to time, or along which the timber has not been cut, etc. It is hard to get a permanently definite shaped channel in which there has been recorded the height of water during floods over a long period, so that an engineer can determine how much water flowed in the channel.

In the case of the Tiber river at Rome, there has been so much filling of land, so much change in the shape and size of the channel, that stage records for two thousand years back don't mean much now. The same is true of many other streams. Some have been so changed by filling in banks, by building walls, and filling low lands, that you can't state what the flow was even though there are records of stage heights. One river on which there is a good permanent channel is the Danube in Austria. There, the channel is very definitely defined in a solid rock gorge. It happens to be in that natural channel that one of these old feudal barons built a castle in the narrow gorge. They were the forerunners of the present day monopolists. They blocked off the mountain highway and charged toll to everyone who [fol. 3926] passed by. These men made marks in the rocks indicating stages of water during floods a thousand years back, and we can get records of stages and records of quantities of water flowing, and frequency of occurrences. Here and there we find places where we can get such definite records. In this case on the Danube, we find that the greatest flood of nine hundred years was about fifty per cent greater than any other flood that occurred in that period. It occurred in the year 1055. Thus, it may be quite possible that a flood double the magnitude of any of record over a comparatively short period of years can occur. We have found a few cases like that.

We have gone over all the storm records of this country to get probable flood magnitudes. For instance, when the flood occurred in Dayton in 1913, it was twice as big as any that had occurred in one hundred twenty-five years, which was as far back as the records went. That is how a really great flood compares with a moderately great flood.

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Records aren't long enough to justify a definite judgment, but from our very general study for the past twenty-five or thirty years, and from our judgment, we believe that here in Chattanooga it is not only probable but it is almost certain that you can have floods during long intervals [fol. 3927] much greater than any floods you have ever had in your recorded history of the city. That fact has a bearing on flood control in this way. The biggest flood you have record of is that of 1867. Chattanooga was then a town of five thousand people. You wouldn't have drowned more than five thousand people whatever flood you had.

Suppose you go ahead and protect your city against floods by means of levees that are just about safe for the greatest flood of record. For a period of years you may develop undisturbed. You feel safe. You build your houses and factories in the low areas. Then suppose you have a flood ten feet higher than that for which you have provided. Your protection is overtopped and broken and the conditions are much worse than if you had no protection at all. When it does break, the water doesn't rise gradually—a few inches at a time—but comes in as a great wave and is extremely destructive. If you are to protect yourselves by levees you don't want any inadequate job done, you want protection against the ultimate floods.

If you happen to be in a place where you can improve the condition of a large channel the situation is different. Suppose you protect yourself by channel enlargement against an 1867 flood, and then a greater one occurs. In [fol. 3928] that case the channel enlargement would give partial protection. Whether it pays to have partial protection on the cost and on what happens if a greater flood than that provided for does occur. —

I have handled flood control problems in a good many cities. It doesn't pay to pay for complete protection in some cases if an unusually great flood which may occur at infrequent intervals will cause only a moderate increase in flood damage. In such instances, it may be wiser to have protection from moderate floods or fairly big floods and stand the extra loss at long intervals. On the other hand, it is a serious matter to only get partial protection if you must depend on levees where a failure would be a complete failure and the catastrophe overwhelming. You don't want

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anything to do with that type of protection unless you go all the way and make yourselves safe.

At Chattanooga, the chances for channel improvement seem to be very slight. The cost of widening this river through your city would be practically prohibitive. I think you can dismiss that prospect. You may improve somewhat by trimming up the banks, clearing trees, bettering the alignment, removing sand bars, etc. You might add ten [fol. 3929] per cent to the channel capacity in that way, and reduce the height of levees a few feet.

Generally speaking, there are two primary methods of protection available to you against main river floods: One is by levees that will keep the river out and the other by building reservoirs to hold back the water up river. These two seem to be the only proper approaches to protection from the main river. As to Chattanooga Creek, you have another problem. It may be possible to enclose that or to separate it by levees, but for main river it seems to rest primarily on levees or walls—about the same thing—and reservoirs. Chances for Chattanooga to protect itself entirely by local protection works are not good for the larger part of the town. It might be conceivable to protect much flooded area in the valley of Chattanooga Creek and some up the river without reservoirs. That would be an expensive undertaking. As to the up river parts of the city, it is a question whether the lay of the land is such as you can feasibly do the job independent of the storage above.

On the other hand, I think it is a fairly safe statement to say that there probably will not be enough dams built [fol. 3930] at any time in the near future to control Chattanooga floods. If we should build all the dams that have been suggested upstream, we might have all the storage necessary, and that might solve the flood problem in Chattanooga. The building of all of those dams is not to be expected within fifty or one hundred years. We expect that a few of the main ones may be built and these should cut the flood stages down to a point where you could supplement their action with local work, and the combined protection of dams and local protection works would make you safe. I suspect that is the most feasible way to handle the situation. Get all the storage you can above and supplement

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with your own works. The two methods together will give protection.

The building of the Norris Dam will cut off about one-seventh of your flood possibilities. The Fowler Bend Dam on the Hiwassee River will cut off about half as much as Norris Dam. But you would need five times as much reservoir storage to complete the job. If a large storage dam could be built on the French Broad and another on the Holston, and if the proposed development on the Little Tennessee should be carried through, then I think the problem would be brought down to where you could handle it yourselves within reasonable limits of cost.

[fol. 3931] Consider now the dams on the main river. They will help in moderate floods; in great floods they do not mean very much. The Chickamauga dam, for instance, will help in more moderate floods. In times of great flood, Chickamauga will amount to very little in control of floods here.

With storage reservoirs on the main tributaries, Chickamauga would then add to protection. Without those storage reservoirs, Chickamauga will help with the moderate floods, but in the greatest floods it will be of no advantage at all. You can't count on Chickamauga Dam plus levees to do the job. You must rely on upstream reservoirs.

The situation in Chattanooga is one of the most serious in the country from the point of view of flood danger. It isn't very popular to say that, but it is a public duty to direct attention to the conditions, so that you may not discover it all at once with a great loss of life and tremendous loss of property.

As to what the proper program should be for Chattanooga in relation to floods, I think your first necessity is that of knowing the facts. We don't, today, know what the possibilities are. Suitable designs cannot be made without [fol. 3932] reliable surveys and information. There have been surveys—limited surveys—but at no time has there been a collection of information that is adequate for handling the problem.

There are such problems as that of enlarging the gorge below Chattanooga. That is an intriguing possibility, but the cost has never been determined. Whether it would be possible to lower the flood stage through the city three or

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four feet by that method, or whether the cost of widening and deepening the river for a number of miles is entirely too great; we do not know, as to the cost of diverting Chattanooga Creek in an effective manner and the cost of pumping the water from the local areas during floods. I think that problem has had no more than a good guess. As to the cost of moving railroad yards above the mouth of Chattanooga Creek or possibly combining all railroad yards in the present flooded lands, I think there has not been adequate information assembled.

The first necessity is to get information thoroughly developed so that the possibilities will be fully known, and danger of flood frequency can be known as well as can be estimated, and the effects of the reservoir construction should be fully understood, and then I think probably a program as to how to handle the situation can be worked out.

[fol. 3933] In the meantime, a program of how to handle a flood before you have your full protection should be worked out so that you have a definite plan of campaign in case of flood. What you would do first on the approach of a flood, how you would give warnings, how you get people out of the low lands, just how to handle the situation point by point. With reference to individual industries, each should be informed regarding what danger it is in. It should be possible to work out methods of handling the individual industries in time of flood. It is possible to have a program worked out so that with flood warnings given, industries in the flood area could get perishable goods upstairs out of reach of the water. In some cases it may be possible to build water-tight walls around buildings and so greatly reduce probable damages.

The possibility of damage and loss of life in your poor residence districts in these floods is very great. I have seen whole blocks of houses in other cities piled up and jammed together until they caught fire and burned. Experiences like that are tragic. And you are all ready for such experience here. You have hundreds of houses on flood land here that would be entirely covered by any great flood rise. [fol. 3934] In handling Tennessee River as a whole—while Chattanooga is the largest city on the river, it is

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still a small element in the whole pattern of the valley, and I am inclined to think that flood control for Chattanooga must be an incident in the main program of navigation, flood control, and power.

I can't see a way out for Chattanooga acting by itself alone. It seems to me you are in the same boat with the whole Tennessee Valley, and that your salvation lies in the continued development of the TVA program, especially as to those storage dams above you. I think one is speaking for the interests of Chattanooga when he speaks for those projects up river. They are essential to your safety and their construction is your first reliance.

[fol. 3935] COMPLAINANTS' EXHIBIT No. 896 (Excluded)

TVA Press Release of September 22, 1935

Fayetteville, Tenn.—Fayetteville and Lincoln County are looking forward to entertaining Mrs. Franklin D. Roosevelt, Secretary of State Cordell Hull, Speaker Joseph W. Byrnes of the House of Representatives, the Directors of the Tennessee Valley Authority and a long list of notables at a large celebration, which the citizens of Fayetteville and Lincoln County are sponsoring on October — when the first segment of the new TVA rural electrification . . . in Lincoln County will be put into service and taken over from TVA by the newly formed Lincoln County Electric Membership Association.

The electrification network in Lincoln County comprising the first TVA rural electrification project to be put into operation in Tennessee. When completed, it will consist of approximately miles of rural lines serving the communities of Camargo, Moline, Blanche, Elora, Kelso, Coldwater, McBurn, Boons Hill, Lincoln, Flintville, Belleville, Howell Hill, Taft, Cyruston, Cash Point, Bellview, Frankewing, Mimosa, Kirkland, Liberty, Brighton, Yukon, Pearl City and Egam. All of these communities will be represented in the celebration. Other rural systems now [fol. 3936] being projected in Tennessee are Rhea, McMinn, Meigs, Giles, Harden and Haywood Counties. . . .

Invitations have been sent to Governor Hill McAllister of Tennessee; Governor Bibb Graves of Alabama; Senators

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Kenneth McKellar and Nathan L. Bachman of Tenn. Congressman J. Ridl Mitchell and the entire Tennessee Congressional delegation; O. C. Van Cleve, Tennessee Commissioner of agriculture; L. R. Neal of the Tennessee agricultural experiment station at Columbia; J. Frank Porter of the Farm Bureau of Tennessee; the members of the Tennessee Rural Electrification Board and State Planning Board; Mayor Hila E. Howse of Nashville; Mayor Watkins Overton of Memphis; Mayor Ed. Bass of Chattanooga; James G. Stahlman, publisher of the Nashville Banner, George Fort Milton, editor of the Chattanooga News; Julian Harris, editor of the Chattanooga Times; Marshall McNeill, editor of the Knoxville News Sentinel; Lit Purdue, publisher of the Nashville Tennessean; Edward J. Meeman, editor of the Memphis Press-Scimitar; George Morris, assistant publisher of the Memphis Commercial Appeal.

The mayors of cities in middle Tennessee and North Alabama have been invited to attend and to appoint delegations to represent their cities at the celebration. The Tennessee cities include Lewisburg, Pulaski, Winchester, Columbia, Lawrenceburg, Murfreesboro, Dickson, Franklin, Shelbyville, Lynchburg, Elkton, Manchester, McMinnville and Mount Pleasant. The Alabama cities include Scotsboro, Huntsville, Athens, Guntersville, Decatur, Hartselle and Ardmore.

[fol. 3938] COMPLAINANTS' EXHIBIT No. 897 (Excluded)

TVA Press Release of October 1, 1935

Bringing Electricity to the Farm

Advance Text—Excerpts of Speech by David E. Lilienthal, Director, Tennessee Valley Authority, at Celebration Upon Opening of Farm Lines of Lincoln County, Tennessee) Electric Membership Association, Fayetteville, Tennessee, October 1, 1935

Above all else, the American people today demand action of their government. Talking and discussing and planning are necessary, but what the country wants is action—and

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plenty of it. To me, TVA is the New Deal in action. This [fol. 3939] celebration today is part of that action.

Two years ago TVA had a mere handful of employees. A big job had been handed to it. It had to lay plans. It had to build up an organization. It had to take all the steps that are preliminary to action. Those plans and preliminary steps were taken and action began almost at once. Today, as you know, only two years after the very beginning up on the Clinch River, TVA has moved a mountainside into a canyon and is ninety per cent completed with the construction of Norris Dam. More than 900,000 cubic yards of concrete have already been placed. Today, less than two years after TVA began work at Wheeler, that dam is also within a relatively few months of completion, stretching a mile across the Tennessee River. Pickwick Landing Dam is well under way, with thousands of men working night and day to rush that job along. After lying idle for twelve years, electricity from Wilson Dam is now bringing comforts to the homes of thousands of our neighbors. A fertilizer plant has been built and is producing, and that fertilizer is being applied on demonstration farms in more than eighty counties throughout the length and breadth of this area. That is action—the kind of action the American people expect and have a right to demand of their government.

[fol. 3940] There is the same demand for action to bring electricity to the farm. We have talked about the electrification of farms in this country for a good many years. You have heard a great deal about it. It has been discussed. Hopes have been expressed. Plans have been laid. There has been talk and talk and talk. What the farmers now need in order to get electricity is some action—sensible and intelligent action—but action, not more talk and more promises. We are in the action stage here today. This occasion today celebrates action about farm electricity. Today a ten year old youngster has thrown a switch, and electricity is at the service of many of your neighbors. More action is right ahead. By the first of January your Association will have 110 miles of lines in Lincoln County, with 1100 farm homes being served. As you know, the same thing is happening elsewhere where the farmers, the townspeople, and TVA together have tackled this prob-

COMPLAINANTS' EXHIBIT No. 897 (Excluded)

lem of bringing electricity to the farmer and his family.

Up to the present, electricity has been denied the farmers of the Tennessee Valley area. After all these years of talk, and in spite of the great need and insistent demand, only two farms have electricity out of every hundred in the Ten- [fol. 3941] nessee Valley Area. Ninety-eight farms out of every hundred are still without it. These are the facts. We can deplore it; we can listen to the reasons and the alibis time without end. But the stubborn fact remains that at this late day ninety-eight farmers and their families out of a hundred are still without electricity in this area. That situation is going to change. It must change. It will change, if that group of selfish interests that have steadily bled the farmers for a generation doesn't block the way. TVA and the farmers and townspeople, working together, are going to see to that. It won't be changed by mere talk, but by action—the kind of action that you and TVA have taken in Lincoln County in recent months.

What is going on in Lincoln County is going on in other parts of the Tennessee Valley area. You know, for example, about the Alcorn County Electric Power Association in northeastern Mississippi. There the city of Corinth and the farms and villages throughout the county are working the problem out on a countywide basis. Down there they have recognized what you recognize here, and what I believe will soon be generally recognized—that to really do this job of farm electrification adequately, the town and the country must join hands. County after County in [fol. 3942] Mississippi and in Tennessee have already followed this principle of the town and the country going together to see to it that electricity is cheap and abundant all over the country. They realize, and I can't emphasize this too much, that for farmers to get electricity widely, the town must cooperate with the country. That is a sound business proposition. It is sound public policy. That's just what they've done in seven Mississippi counties served by TVA; town and country have joined a single association and are pulling together. The plan works. In Alcorn County they cut rates 50%. Yet at the end of the first year the Association had 37¢ of every dollar they took in, as net profit. And remember; that profit stayed in the local community. It wasn't drained out of the county by

COMPLAINANTS' EXHIBIT No. 897 (Excluded)

outsiders. It meant more money in circulation right there at home.

It won't be many years until those folks in the county-wide associations will own their own electric systems free of the last cent of debt. For example, Alcorn County paid \$51,000 off on their initial debt of \$114,000 (almost half) in a little more than a year. When the debt is all paid off then rates can be cut even lower, for there won't be interest and amortization to take care of. Their plans are working [fol. 3943] out successfully because they are based on these three sound principles of business:

1. Low rates and plentiful use of power;
2. Town and country together;
3. Keep the profits at home, with consumers as business partners.

You are making history here today. What you are doing here in Lincoln County I believe will spread all over this Valley. Farmers, I believe, realize that farm life cannot take its rightful place in the life of the whole community so long as it continues to be true, as it is in the Tennessee Valley area, that only two farms out of a hundred have electricity. The farmers and their families are headed for action and are going to get it, the town and the country working together and the TVA cooperating with both. They are getting ready for action, and plenty of it, in your neighboring community, Giles County. Pulaski is the town and Giles County is the farm — community working together to get rural electricity throughout that County. The same thing is going on at Dayton and its farm neighborhood. So with West Tennessee, where we look forward to the cooperation of the towns in that area in getting electricity to farmers through perhaps twenty-five counties.

[fol. 3944] TVA has an ample source of electricity from the Tennessee River. That electricity belongs to all of us. Transmission lines are being built. The townspeople want to cooperate. Your Senators and Congressmen have put their shoulders to the wheel. The State has cooperated through the Acts of the Legislature, through the Tennessee

COMPLAINANTS' EXHIBIT No. 897 (Excluded)

Rural Electrification Administration, and the help of your far-sighted Governor. The farmers and their representatives and agencies are working together. With cooperation as the formula, we will have more action like that in Lincoln County, like the action in the many counties in Mississippi, like the action in Giles County and in Rhea County. And I don't hesitate to predict that the time is soon at hand when the disgrace, for it is nothing less than a disgrace, of having only two farms in the Tennessee Valley out of a hundred electrified, will be a thing of the past.

[fol. 3945] COMPLAINANTS' EXHIBIT No. 898 (Excluded)

TVA Press Release of October 21, 1935

Tupelo, Miss., Oct. 21.—The sixth cooperative electric power association supplying TVA power to small towns and rural areas was formally launched here today with the signing of a contract between the TVA and the Tombigbee Electric Power Association, which will take over and operate the present TVA lines in Lee and Itawamba Counties, Mississippi, beginning November 1, 1935.

The property transferred is valued at more than \$350,000 and will, at the outset, supply electric service at TVA rates to 1,742 customers, located in the communities of Guntown, Slatillo, Sherman, Verona, East Tupelo, Shannon, Nettleton, Fulton, and a series of rural lines. The Tombigbee Association is the first TVA cooperative association to undertake to serve the whole of two counties. The main office will be located in Tupelo, county seat of Lee County, and a collection and service office will also be located in Fulton, county seat of Itawamba County. The Executive Committee of the new association is as follows:

[fol. 3946] President	Keith Barnett, Nettleton
1st Vice-Pres.	Rex Reed, Tupelo, R. F. D.
2nd Vice-Pres.	G. T. Mitchell, Guntown
Treasurer	V. S. Whiteside, Tupelo, R. F. D.
	A. J. Mattox, Fulton

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The Tombigbee Electric Power Association is the sixth non-profit cooperative association now engaged in the distribution of TVA power. The first of these associations was the Alcorn County Electric Power Association, which began operations on June 1, 1934. Since then similar associations have gone into operation in Pontotoc, Prentiss, and Tishomingo Counties, Mississippi, and Lincoln County, Tennessee. Other associations have been organized and are now planning construction of lines in Rhea and Meigs Counties, Tennessee, Monroe County, Mississippi, and other areas in the Tennessee Valley.

[fol. 3947] COMPLAINANTS' EXHIBIT No. 899 (Excluded)

TVA Press Release of October 24, 1935

Power Shortage and Business Recovery

Excerpts from Address of David E. Lilienthal, Delivered at Eight-County Mass Meeting at Dickson, Tennessee, on October 24, 1935

This is an unusually interesting gathering. For here in this enterprising city farmers from a half dozen counties in the trade area of Dickson have come together with the residents of your city. You are drawn together by your interest in the greatest force of modern times: Electricity. This meeting is itself a demonstration in concrete form that town and country are bound together in ties of mutual interest, and that when they cooperate, that cooperation benefits both the farmer and his neighbor in the city.

First of all I want to talk to you of a subject that is of interest to those of you, particularly the business men, who live in Dickson and other towns and cities. And then let [fol. 3948] me describe what is going on in this Valley in the job of getting electricity to the farmers who have for so long been denied its benefits. Those two phases of electricity—in the town and the country—are part of a single picture—they fit together.

Within the past twelve months the United States has gone a long way toward recovery and prosperity. This

COMPLAINANTS' EXHIBIT No. 899 (Excluded)

movement has been notable and marked in the Tennessee Valley region. The full recovery of the country and its onward stride toward a new level of prosperity for all depends in large measure upon an adequate, abundant, and cheap source of electrical power.

What is true of the United States as a whole is true also of individual communities. A town or city which has an abundant and cheap source of electricity has a great opportunity and advantage in the march toward recovery. A community which is not assured of an almost unlimited supply of cheap electricity may be under a genuine handicap. Throughout the country you will find business men who are thinking of the progress of their city, and city officials who are thinking of industrial payrolls and property values for their cities are equally determined [fol. 3949] that their town or their city shall have an abundant supply of cheap electricity, for the expansion of industry that lies ahead for the country and for our region.

A shortage of power would be nothing less than a calamity. A power shortage would put hobbles on business, retard recovery, destroy returned confidence. And yet that is what the Tennessee Valley region might be facing next summer if Norris Dam were not ahead of schedule, and ready to store water next February. The business men of the Tennessee Valley region can give the order "Full speed ahead" secure in the knowledge that there will be an adequate supply available for the period of renewed activity which lies ahead.

When TVA was planning the installation of power generating facilities in the navigation and flood control dams at Norris and Wheeler, you heard a good deal of criticism from certain quarters. The utilities said: "There is a huge surplus of electricity in this area now; don't add to this surplus." But you don't hear much about this "power surplus" in recent months and weeks—and you probably won't hear much about it, because the "huge surplus" of dependable power just doesn't exist. Lower rates and industrial recovery have brought consumption of electricity [fol. 3950] throughout the country and in this area to a new all-time peak. For example, production of power in this region in July was 21% higher than in July a year ago. Domestic use has made sensational gains. New uses

COMPLAINANTS' EXHIBIT No. 899 (Excluded)

for industrial power are appearing. Old steam plants that have not been operated for a long time have been pressed into service. If Norris Dam had been completed last winter all the extra power its stored water would produce would be valuable and have a ready sale, and at the same time water levels for navigation would be improved.

This has been a very dry year. That is no justification for a power shortage. Factories have to have power in dry seasons as well as normal ones; homes and farms need electricity regardless of rainfall. The dry years come and must be planned for. An adequate supply of electricity must take dry years into account, and emergencies of all kinds require an adequate reserve.

We are just entering the power age. No man can see what lies ahead. The use of power has increased by leaps and bounds right through the depression. The "saturation point" in electric use is hardly fixed until it has been far exceeded. What low rates will do has already been demonstrated in your neighbor cities using TVA electricity. [fol. 3951] Under low TVA rates the people of Alcorn County, Mississippi, used three times as much electricity as they had under high rates, all in the course of a single year. Comparable results in even shorter periods have been experienced elsewhere in Pulaski and Dayton, Tennessee, in Athens, Alabama, and in other towns. The private utilities have also had a remarkable growth in use. And we are only at the beginning. A power plant adequate today may be wholly inadequate a year hence, as the people really put the force of electricity to work for them.

If every individual town and city had to build a generating plant large enough to care for all the future growth required by industrial expansion and increased home and farm use, it might well tax the resources of that town; but when a number of towns are connected together with high transmission lines to a large potential source of power supply produced at very low cost, the communities that are so served have a great advantage in cost and in assurance of supply.

I suppose it was considerations of this kind that were in the minds of your city officials when they conferred with the Tennessee Valley Authority more than a year ago seeking a source of power supply from the Tennessee Valley

COMPLAINANTS' EXHIBIT No. 899 (Excluded)

[fol. 3952] Authority. I have been told that when your municipal electric plant was constructed it was adequate for the needs of your city, but as the city has grown, as the use of electricity expanded, that plant has gradually become inadequate. To replace or add to this plant would involve the city in a large capital expenditure. But the Tennessee Valley Authority has under construction certain dams which will make the Tennessee River navigable and aid in the prevention of floods, and at the same time and with the same structures, be capable of producing large quantities of cheap hydroelectricity. These structures in the Tennessee River make possible a supply of power from which all the various communities of the Tennessee Valley region within transmission distance may draw. And remember this: The potential power in the Tennessee River belongs to you. That power is ready to work for you and your fellow citizens throughout this region.

The directors of TVA have been gratified to find throughout this Valley that the people of the towns have been intensely interested in cooperating to get electricity to the farmers of their trade area. Dozens of business men and city officials have talked to me on this subject. With few [fol. 3953] exceptions they have taken the same position: They realize that the town is the key to the problem of getting electricity to the farmer. And throughout this Valley the town and the country are cooperating. It is not something in the future. It is here. The plan is at work. It benefits the town by developing its trade area, by improving its relations with its farm neighbors and customers, and by giving the farmer additional means of increasing his income. And it benefits the farming communities, relieving the farmer of much of the drudgery of the farm and giving him a tool by which he can increase his income and make farm life more attractive and satisfying.

[fol. 3954] COMPLAINANTS' EXHIBIT No. 900 (Excluded)

TVA Press Release of November 2, 1935

Completion of the first steps in negotiations for the TVA transmission loop in West Tennessee was announced last night by David E. Lilienthal, director and general counsel. Mr. Lilienthal reviewed details of the proposed \$1,000,000, transmission line uniting 8 municipal light and power plants in West Tennessee, Bolivar, Somerville, Trenton, Milan, Covington, Dyersburg, Jackson, and Union City. He said the plan, which was drafted at the request of the West Tennessee Mayors Association, had now been submitted to the Mayors of all 8 cities.

"To explain details of the plan and to cooperate in working out individual contracts adaptable to special conditions of each city," Mr. Lilienthal said, "Representatives of the Authority have been stationed in Jackson for the past few weeks and have held meetings with city officials and groups of citizens in all cities.

"Rural meetings have also been held in each of the counties affected to obtain preliminary information so that rural lines may be constructed just as soon as the cities take [fol. 3955] action and thus make sources of TVA power available in their trade areas.

"Several of the cities have already signed contracts for TVA power and in the other cities committees have been appointed or consultants engaged to study the matter further and, when ready, to consult with the Authority.

"Definite action in the construction of the loop must now await the outcome of these studies and action by the remaining municipalities. This will necessarily take some time. However, our engineers are already at work on plans for supplying service to municipalities and rural areas immediately adjacent, so that construction may be rushed forward without delay when a decision is reached by the municipalities concerned."

[fol. 3956] COMPLAINANTS' EXHIBIT No. 901 (Excluded)

TVA Press Release of November 26, 1935

The Work of The Tennessee Valley Authority

Advance Text of Remarks of David E. Lilienthal, Director and General Counsel, Tennessee Valley Authority, Before a Meeting at Louisville, Kentucky, under the Auspices of the City of Louisville, November 25, 1935, at 8:00 P. M., held at the Auditorium

Kentucky is one of the states most directly affected by the work of the Tennessee Valley Authority. The headwaters of the river rise near your borders, and it is in this state, at Paducah, that the Tennessee River joins the Ohio. One of the principal dams of the Tennessee Valley Authority now nearing completion is only twenty-five miles from the soil of your state. And it is in Kentucky that TVA for some time has been exploring foundations for a huge dam on the lower river. But most important of all, Kentucky, by geography, soil, climate, culture, and history, is natural kin to that vast area in which President Roosevelt and Congress have set up the country's first program of region-wide development.

Close as TVA is to you of Kentucky, it is quite likely that most of you have no more than a fragmentary picture of this project, gathered from newspaper accounts or perhaps from a visit to one of the construction sites. I am therefore particularly pleased at this opportunity to describe the project as a whole, to attempt to tell you the [fol. 3957] objectives of the TVA as laid down by Congress and the action the Authority has taken in its two and a half years of life to translate those objectives into actual accomplishment.

The TVA is something new in American government, but the problems it was directed to work out are by no means new. Nor are those problems peculiar to one section of the country; they are critical national problems, concerned with the basic resources upon which the well-being of the entire country depends: (1) the control and use of our water; (2) the preservation of our land—our soil; and (3) the more widespread use of our chief source of energy—electricity.

The background, the setting of TVA's activities with respect to land, water resources, and electricity are well-known

COMPLAINANTS' EXHIBIT No. 901 (Excluded)

to all of you; for Kentucky is one of the seven states of the Tennessee Valley. The other states forming part of the Tennessee Valley, as you probably recall, are North Carolina, Virginia, Tennessee, Alabama, Georgia, and Mississippi. In this great drainage basin are more than twenty million acres of land of every kind and description; the highest mountains in the United States east of the Rockies: rolling country; flat lowlands; forests; every kind of land [fol. 3958] from the richest to the poorest. Most of you have traveled through the region by automobile and know how varied a region it is: cotton, tobacco, corn, cattle, mining, manufacture of every description. I hope you will keep this picture of the Tennessee Valley area in mind while we are discussing the job the President and Congress turned over to the TVA and what we have been trying to do to meet these obligations. * * *

*I spoke earlier of three national issues TVA was concerned with: (1) the control and utilization of water resources on a regional basis; (2) stopping our waste of soil; and (3) a wider use of electricity, our major source of energy in the home and the factory.

* * * * *

Mr. Lilienthal explained how the construction of dams by the TVA for navigation and flood control necessarily resulted in the creation of water power by the same structure that provides for navigation and flood control.

* * * * *

Shall this vast power in the water of a public stream be wasted, or shall it be used to relieve men and women of drudgery, give them comforts and conveniences, and turn the wheels of industry? To ask the question is to answer it. [fol. 3959] The thought of wasting a great source of energy is against every American tradition. And so President Roosevelt and Congress have provided that the power in the Tennessee River shall no longer run unused to the sea, but that power shall be put to work.

The production of power by these navigation and flood control dams furnishes the answer, in part, to the question: "How is this vast project to be paid for?" By selling the power the Federal Government will receive a cash return

COMPLAINANTS' EXHIBIT No. 901 (Excluded)

which will not only make the electricity program self-supporting, but in the course of years will repay the investment in the navigation and flood control works.

TVA at present has only one dam in operation, that is at Muscle Shoals. From this dam the Authority has realized operating revenues totaling \$1,850,000. In the last four months alone, power of a value of \$452,000 was produced and used. The TVA has signed contracts for the sale of the entire output of Wilson Dam, though most of this revenue cannot be received until pending litigation is decided.

You are familiar with the fact that contracts with TVA contain a schedule of electricity rates which are often described as "yardstick" rates. In creating TVA, Congress in effect declared it to be the Government's policy to dis-[fol. 3960] tribute the surplus power, necessarily created by navigation and flood control dams, at the lowest possible rates and in such a manner as to encourage increased domestic and rural use of electricity. A number of electric cooperative associations have been formed in the area of the Authority's operations. These organizations and a number of municipalities purchase power from TVA at wholesale and distribute to ultimate consumers. The experience of these distributors of TVA power has been a remarkable demonstration of the effect of reduced electric rates on the extent to which people will put electricity to work for them. The so-called TVA rates for home use begin at 3¢ per kilowatt hour and with greater use decrease to as low as 4 mills per kilowatt hour. A householder having lights, an electric refrigerator, washing machine, vacuum sweeper, toaster, and iron, and doing all cooking by electricity, pays about \$5.00 a month where these rates are in effect. Establishment of these rates by the wholesale customers of TVA effected an initial rate cut of 50% and yielded an average saving to users of approximately 2¢ for every kilowatt hour used. • • •

We are in a new age, the age of electricity. No man today can foresee what electricity holds for us a decade hence. [fol. 3961] And yet the American people are being barred from the full benefits of the era of electricity by rates that prevent a full use of this servant of men. I believe the people of the country are going to demand an end of high rates and low use of electricity. Low rates are financially sound;

COMPLAINANTS' EXHIBIT No. 901 (Excluded)

they are necessary to our national well-being; they mean an electrified America.

We have been asked many times whether TVA electricity will be available in Kentucky. The answer is yes. The TVA law requires the Authority to provide for an equitable distribution of the power among the states, municipalities, and other agencies within reasonable transmission distance of the dams. Norris Dam is within transmission distance of Kentucky, of course, being only twenty-five miles from the state line.

A great backlog of cheap power at Kentucky's door, supplementing its present sources of supply, is a great asset to the whole state. The power resources of the country are today undergoing a strain to meet the needs. This is due to a number of factors: the resumption of industrial activity, the effect of low rates in increasing use, the discovery of new uses for power, the needs of widespread farm electrification just ahead. In some parts of the country a power [fol. 3962] shortage is something to give real concern. That would be a calamity, and block business recovery. Whatever may be true elsewhere, the early completion of Norris and Wheeler Dams by the TVA will prevent a shortage in this area. The people of the Tennessee Valley can proceed with their plans for industrial expansion and rural electrification secure in an adequate supply of cheap electricity.

[fol. 3963] COMPLAINANTS' EXHIBIT No. 902 (Excluded)

TVA Press Release of July 29, 1936

Address Before TVA Employees, by Arthur E. Morgan,
First Methodist Church, Knoxville, Tennessee, July 29,
1936

There are many ways in which we may work in this region toward a better ordered social and economic life, such as the President has so often expressed as his idea of the proper work of the TVA. Sometimes those results can be secured by simply furnishing an opportunity, sometimes by a little benevolent despotism. The Tennessee Valley Authority has used both. For instance, there is our training program. We might have compelled workmen to take those courses. We might have said, you are perfectly free to work for the

COMPLAINANTS' EXHIBIT No. 902 (Excluded)

TVA or not as you choose, but if you choose to work for us you must take part in our training program. We did not do that. We simply offered the opportunities. We did not require workmen to accept them, and we did not offer any additional security to those who did so. That is an example of assistance without any compulsion.

In other fields, however, it sometimes occurs that it seems better for us to impose our judgment upon the localities, [fol. 3964] to use a certain amount of benevolent despotism, to say from the outside that we have better judgment and greater experience and that we should dictate what the course should be. Sometimes one way seems better and sometimes the other. For instance, we might leave the determination of electric power rates to the communities. However, we have a picture of what would be a good policy for the communities, and so we ask the individual communities to defer to the TVA judgment; we want to say not only what we shall be paid for current but what it shall be sold for to each person in the community. In that case it is not enough to simply present an opportunity, we specifically dictate for the good of the community. Sometimes we must work by the free choice of methods as in our training program. Sometimes we work by benevolent dictation as in our power rates. We will find that the TVA is too complex, too varied a job to set any hard and fast method. We must feel our way and work by rule of reasonableness rather than by rule of government.

[fol. 3965] COMPLAINANTS' EXHIBIT No. 903 FOR IDENTIFICATION

This exhibit is the same as Defendants' Exhibit 60 which is an original exhibit.

[fol. 3966] COMPLAINANTS' EXHIBIT No. 904

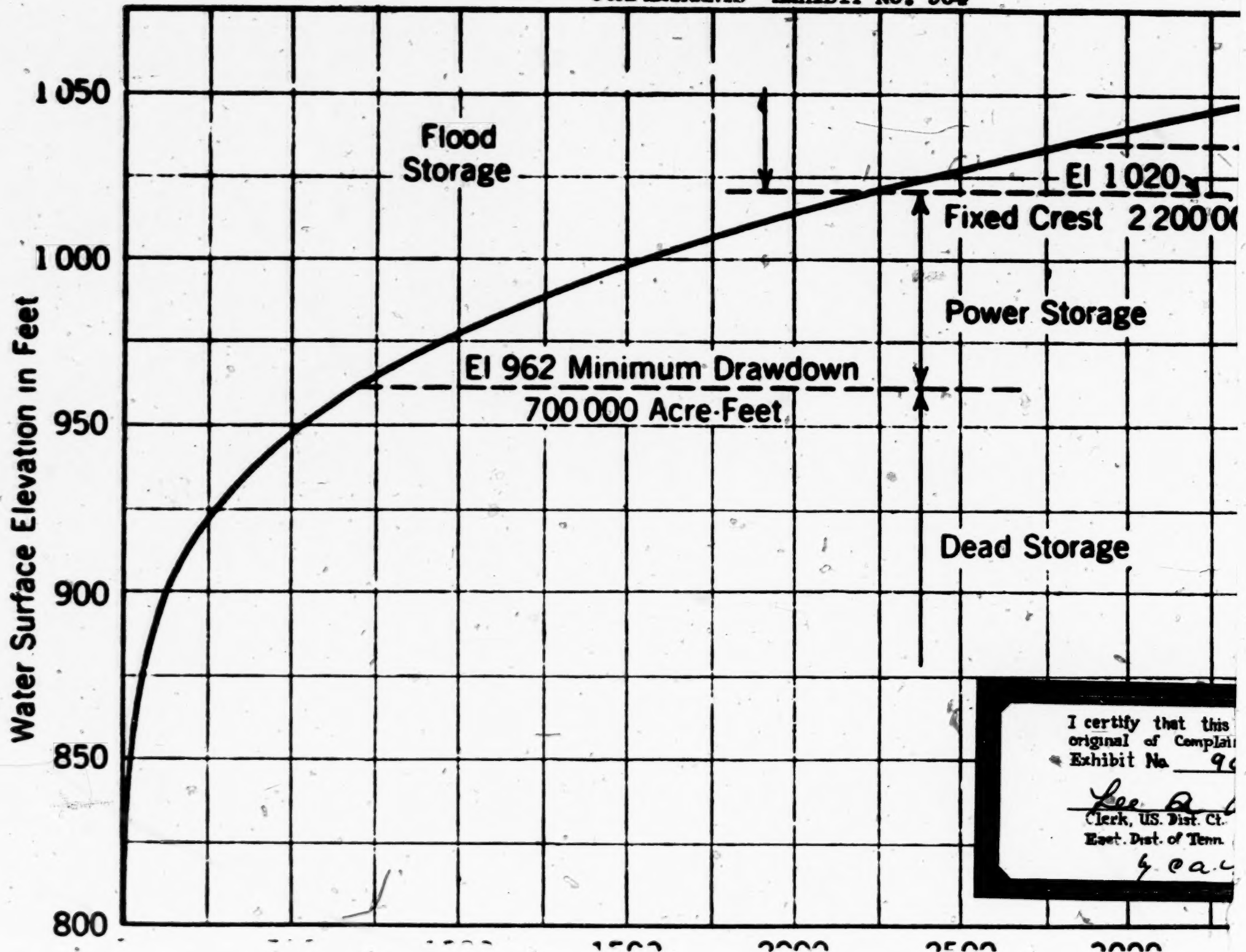
Chart entitled "Figure 3—Capacity Curve for Norris Reservoir With Controlling Elevations" taken from an article by James S. Bowman in "Civil Engineering", April 1935.

(Original Exhibit)

3926

(Here follows one photolithograph, side folio 3966a)

COMPLAINANTS' EXHIBIT NO. 904



I certify that this
original of Complaint
Exhibit No. 904

Lee B. Lee
Clerk, U.S. Dist. Ct.
East. Dist. of Tenn.

Lee B. Lee

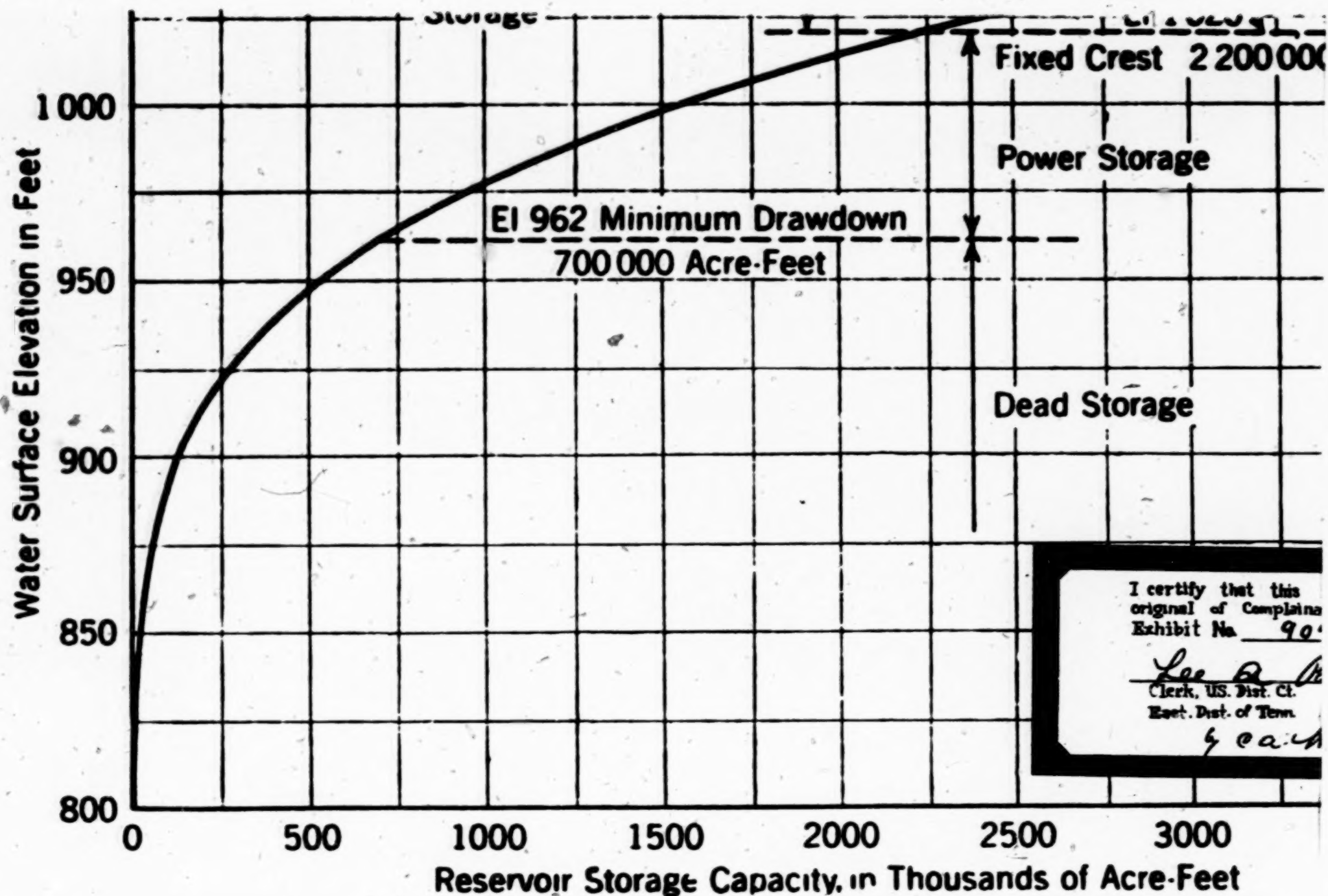
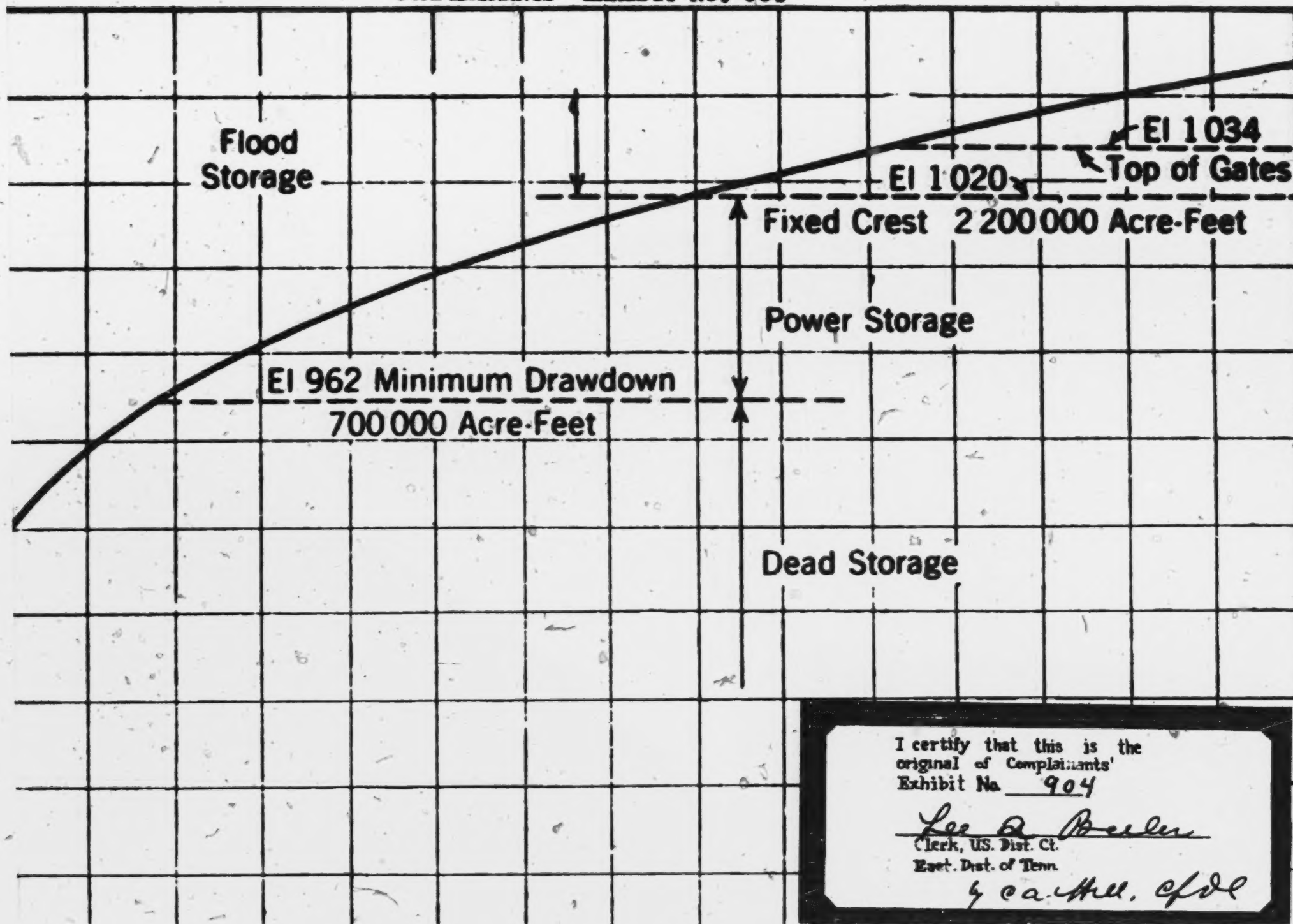


FIG. 3. CAPACITY CURVE FOR NORRIS RESERVOIR WITH LING ELEVATIONS

Taken from article "A Complicated Problem of Regulation" by James S. Bowman in Civil Engineering for April, 1935, offered as part of cross examination of James S. Bowman.

COMPLAINANTS' EXHIBIT NO. 904

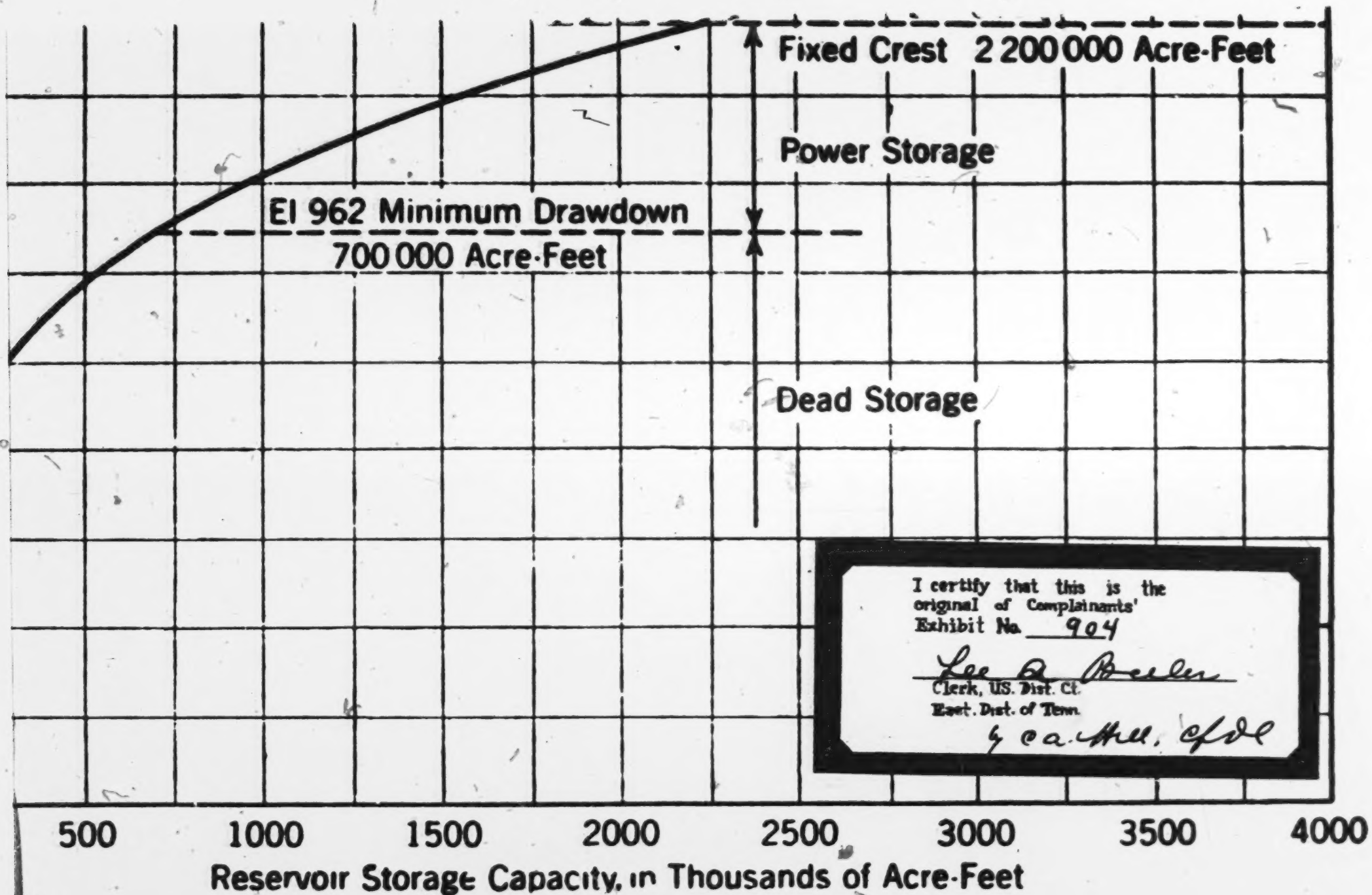


I certify that this is the
original of Complainants'
Exhibit No. 904

Lee A. Beeler
Clerk, U.S. Dist. Ct.

East. Dist. of Tenn.

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I certify that this is the
original of Complainants'
Exhibit No. 904

Lee A. Butler
Clerk, U.S. Dist. Ct.
East. Dist. of Tenn.

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CAPACITY CURVE FOR NORRIS RESERVOIR WITH CONTROLLING ELEVATIONS

re "A Complicated Problem of
James S. Bowman in Civil En-
gineering, 1935, offered as part
of the testimony of James S. Bowman.

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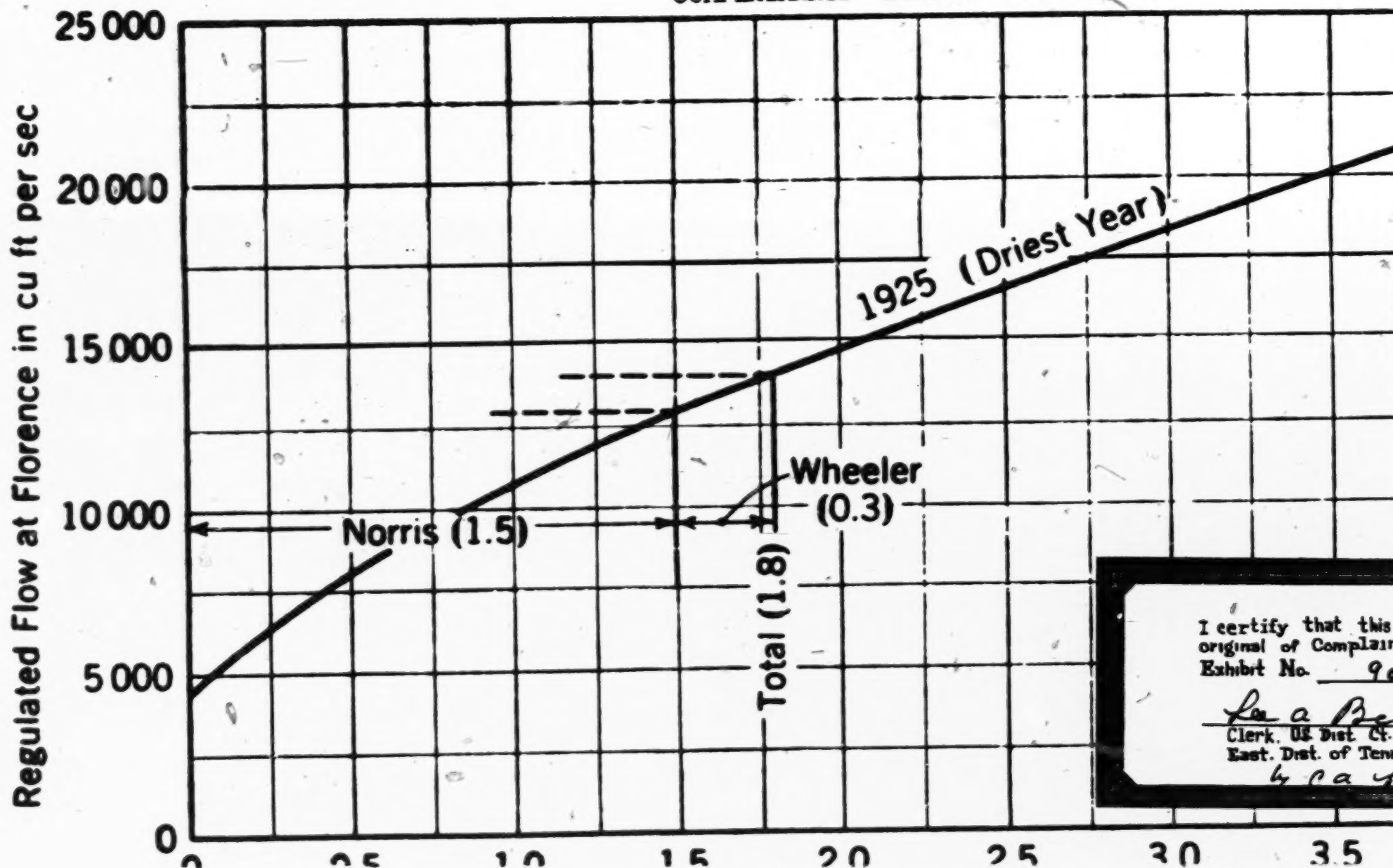
COMPLAINANTS' EXHIBIT No. 905

Chart entitled "Figure 2—Storage Required for Various Regulated Flows at Florence, Alabama" taken from an article by James S. Bowman in "Civil Engineering", April 1935.

(Original Exhibit)

(Here follows one photolithograph, side folio 3966b)

COMPLAINANTS' EXHIBIT NO. 905



I certify that this
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Exhibit No. 90

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Clerk, US Dist Ct.
East. Dist. of Tenn
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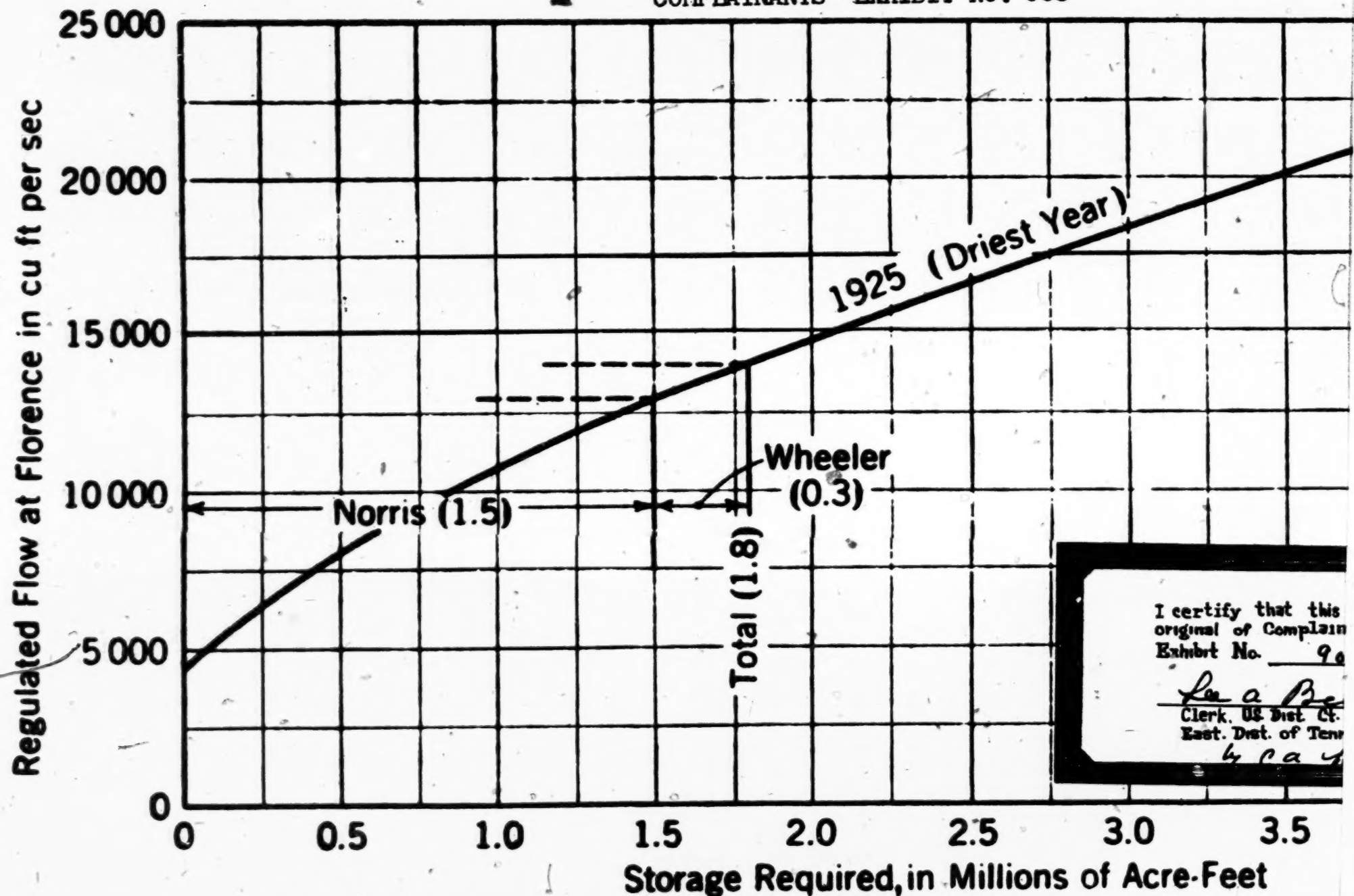
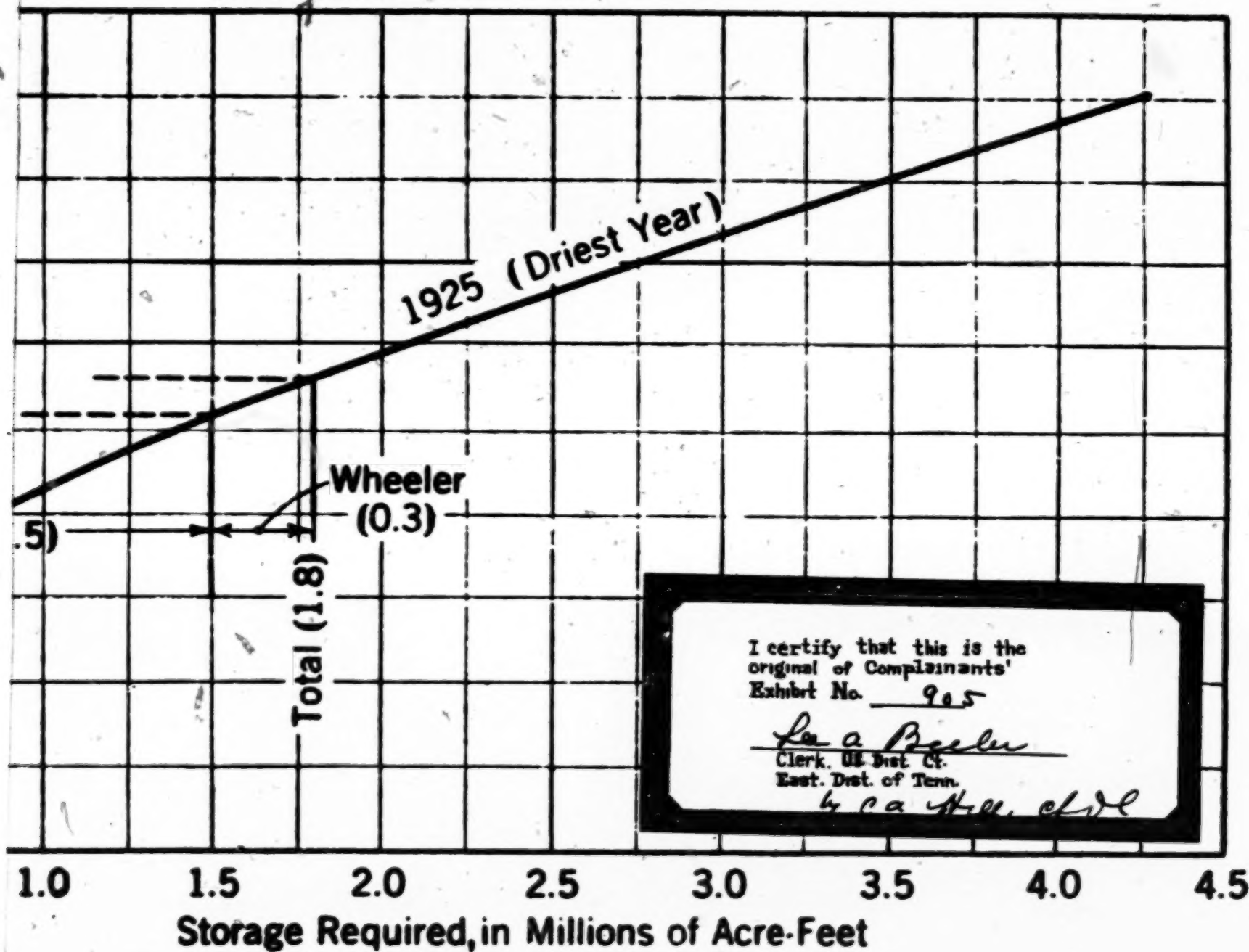


FIG. 2. STORAGE REQUIRED FOR VARIOUS REGULATED FLORENCE, ALA.

Taken from article "A Complicated Problem of Regulation" by James S. Bowman in Civil Engineering for April, 1935, offered as part of cross examination of James S. Bowman.



I certify that this is the
original of Complainants'
Exhibit No. 905

Lawrence A. Beeler
Clerk, U.S. Dist. Ct.
East. Dist. of Tenn.

W. C. A. H. C. H. C. H.

REQUIRED FOR VARIOUS REGULATED FLOWS AT
FLORENCE, ALA.

3966-B

COMPLAINANTS' EXHIBIT No. 906 (Excluded)
(Omitted)

[fol. 3967] COMPLAINANTS' EXHIBIT No. 907 (Excluded)

Chart
(Original Exhibit)

[fol. 3968] COMPLAINANTS' EXHIBIT No. 908

Resolution of the Board of Directors of TVA, dated July 1, 1936

After examining the provisions of Water Control Bulletins No. 1 and No. 2, submitted by the Hydroelectric Committee, and finding them satisfactory, the Board ordered a true copy of each bulletin filed with the Authority's records as Exhibit 7-1-36e, and then issued the following instructions which are to govern the preparation of subsequent bulletins and the administration of the provisions of all water control bulletins hereafter approved by the Board:

The rest of this exhibit is the same as paragraphs numbered 1, 2 and 3 of Complainants' Exhibit No. 923 and, for brevity, is here omitted.

[fol. 3969] COMPLAINANTS' EXHIBIT No. 909

Chart from page 515 of Complainants' Exhibit No. 115
(Original Exhibit)

[fol. 3970] COMPLAINANTS' EXHIBIT No. 910 FOR IDENTIFICATION

Daily Reports of Releases of Water at Norris Dam
(Omitted)

[fol. 3971] COMPLAINANTS' EXHIBIT 910-A

TVA Water Control Bulletin, Dated December 19, 1936

The Water Control Committee advises that at each flood this winter, Wheeler Reservoir will be filled to elevation 556. The reservoir will be operated for the control of floods at Pickwick and other critical points below Wilson Dam so far as possible, with the incidental benefits in the way of regulation of flood flows in the Mississippi River. To accomplish this, the operation will follow a schedule approximately as follows:

After the passage of each flood the reservoir will be slowly drawn down at about the rate of 2 feet per week until it reaches level 553, where it will be held until the approach of the next flood. Just before the occurrence of a flood the reservoir will be drawn down as much more as seems necessary, but not below 550. Then during the flood it will be filled up to 556, at such a time as to be of most benefit to Pickwick.

(Here follows one photolithograph, side folio 3972)

COMPLAINANTS' EXHIBIT NO. 910-B

TENNESSEE VALLEY AUTHORITY ENGINEERING DATA DIVISION

Knoxville, Tennessee

February 9, 1937.

RIVER STAGES AND RAINFALL

Readings are 7:00 A.M. C.S.T., except as noted

STATION	Miles Above Mouth	Flood or Bank Full Stage	Dis- charge cfs	Stage	Eleva- tion	Change 24 hrs.	Rainfall 24 hrs.	Weather
<u>TENNESSEE RIVER</u>								
1 Knoxville	648	20	37,400	8.5r	806.1	+3.8	1.84	Raining
2 Loudon	592	22	43,000	8.9r	735.1	+1.1	1.42	Cloudy
3 Kingston	568	26	—	13.5r	713.5	+3.8	3.31	Cloudy
4 Breedenton	523	20	84,400	14.8r	680.0	+3.8	2.91	Raining
5 Chickamauga Dam	471	660	75,100	—	641.4	+1.8	1.24	Raining
6 Chattanooga	464	30	—	16.7r	637.5	+1.2	1.06	Raining
7 Hales Bar Reservoir	431	50	—	42.85	631.45	+0.35	—	—
Hales Bar Tailwater	—	30	72,000	13.6	602.2	+0.7	—	—
8 Guntersville	358	25	86,500 ¹	17.3r	583.6	+1.9	2.85	Cloudy
9 Guntersville Dam	349	565	—	—	581.10	+1.95	1.96	Cloudy
10 Decatur U.S.G.S.	305	20	—	15.6	549.9	+0.3	2.24	Cloudy
11 Wheeler Reservoir ^b	275	555	124,400	—	547.00	-0.25	1.53	Cloudy
12 Wilson Reservoir ^b	259	505	124,700	—	506.13	+0.01	—	—
13 Florence	257	18	140,700	13.4r	414.5	+4.0	2.06	Cloudy
14 Pickwick Dam	207	385	123,000 ¹	—	372.8	-3.0	.64	Cloudy
15 Johnsonville	96	31	—	30.9r	351.7	-0.6	.43	—
<u>HOLSTON RIVER</u>								
16 Gate City (N. Fork)	151	7	3,880	5.6r	1203.4	+1.6	—	—
17 Kingsport (S. Fork)	148	8	7,940	4.4r	1183.2	+0.3	1.40	Raining
18 Rogersville	104	14	17,500	7.0r	1060.9	+2.2	1.40	Raining
<u>FRENCH BROAD RIVER</u>								
19 Embreeville (Nolichucky)	89	8	2,140	2.5s	1521.9	0	.89	Raining
20 Asheville	147	6	—	—	—	—	.29	Raining
21 Newport	78	6	4,820	3.6r	1016.5	+0.1	1.00	Raining
22 Dandridge	45	12	14,900	4.7r	907.5	+0.4	1.30	Raining
<u>LITTLE TENNESSEE RIVER</u>								
23 Bryson (Tuckasegee)	97	9	3,760	3.0r	1719.8	+0.5	.95	Raining
24 McGhee	19	20	12,600	8.5r	768.6	+0.8	1.69	Raining
<u>CLINCH RIVER</u>								
25 Cleveland	272	6	2,100	4.9r	1604.9	+1.5	1.32	Raining
26 Tazewell	152	14	—	14.4r	1027.0	—	2.00	Raining
27 Arthur (Powell R.) ¹	154	15	—	—	—	—	—	—

TENNESSEE RIVER

1	Knoxville	648	20	37,400	8.5r	806.1	+3.8	1.84	Raining
2	Loudon	592	22	43,000	8.9r	735.1	+1.1	1.42	Cloudy
3	Kingston	568	26	--	13.5r	713.5	+3.8	3.31	Cloudy
4	Breedenton	523	20	86,400	14.8r	680.0	+3.8	2.91	Raining
5	Chickamauga Dam	471	660	75,100	--	641.4	+1.8	1.24	Raining
6	Chattanooga	464	30	--	16.7r	637.5	+1.2	1.06	Raining
7	Hales Bar Reservoir	431	50	--	42.85	631.45	+0.35	--	--
	Hales Bar Tailwater		30	72,000	13.6	602.2	+0.7	--	--
8	Guntersville	358	25	86,500 ^f	17.3r	563.8	+1.9	2.85	Cloudy
9	Guntersville Dam	349	565	--	--	561.10	+1.96	1.96	Cloudy
10	Decatur U.S.G.S.	305	20	--	15.8	549.9	+0.3	2.24	Cloudy
11	Wheeler Reservoir ^b	275	555	124,400	--	547.00	-0.25	1.53	Cloudy
12	Wilson Reservoir ^b	259	505	124,700	--	506.13	+0.01	--	--
13	Florence	257	18	140,700	13.4r	414.5	+4.0	2.06	Cloudy
14	Pickwick Dam	207	385	123,000 ^f	--	372.8	-3.0	.64	Cloudy
15	Johnsonville	96	31	--	30.9f	351.7	-0.6	.43	--

HOLSTON RIVER

16	Gate City (N. Fork)	151	7	3,880	5.6r	1203.4	+1.6	--	--
17	Kingsport (S. Fork)	148	8	7,940	4.4r	1193.2	+0.3	1.40	Raining
18	Rogersville	104	14	17,500	7.0r	1060.9	+2.2	1.40	Raining

FRENCH BROAD RIVER

19	Embreeville (Nolichucky)	89	8	2,140	2.5s	1521.9	0	.59	Raining
20	Asheville	147	6	--	--	--	--	.29	Raining
21	Newport	78	6	4,820	3.6r	1016.5	+0.1	1.00	Raining
22	Dandridge	45	12	14,900	4.7r	907.5	+0.4	1.30	Raining

LITTLE TENNESSEE RIVER

23	Bryson (Tuckaseegee)	97	9	3,780	3.0r	1719.8	+0.5	.95	Raining
24	McGhee ^a	19	20	12,600	8.5r	758.6	+0.8	1.69	Raining

CLINCH RIVER

25	Cleveland	272	6	2,100	4.9r	1504.9	+1.5	1.32	Raining
26	Tazewell ^f	152	14	--	14.4r	1027.0	--	2.00	Raining
27	Arthur (Powell R.) ^f	154	15	8,900	10.9r	1065.7	+7.0	2.00	Cloudy
28	Norris Reservoir ^b	80	1020	(2,318,000 Ac.-ft)	--	1027.54	-0.18	2.66	Cloudy
	Norris Tailwater ^b Below Dam	836		25,000 ^f	12.95	--	+2.86	--	--

HICKASSEE RIVER

29	Murphy	97	10	3,220	4.4r	1515.0	+1.4	1.67	Raining
30	Charleston	19	22	10,200 ^f	9.7r	675.2	+3.4	1.57	Raining

ELK RIVER

31	Prospect	42	22	18,000	20.6r	583.7	+14.9	2.42	Cloudy
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TENNESSEE RIVER

	Scottsboro	386	40	78,500	11.2r	580.0	+1.9	1.87	P Cloudy
	Savannah	190	39	124,400	25.4f	366.8	-3.6	.60	Cloudy

REMARKS: Norris release for February 8 was 24,000 cfs

3972

[fol. 3973] COMPLAINANTS' EXHIBIT No. 911 FOR IDENTIFICATION

Daily Reports of Releases of Water at Norris Dam
(Omitted)

[fol. 3974] COMPLAINANTS' EXHIBIT No. 912

Defendants' Exhibit No. 29 in the case of Tennessee Valley Authority, et al., v. Ashwander, et al.
(Original Exhibit)

[fol. 3975] COMPLAINANTS' EXHIBIT No. 913

Plate 19 from Part 2 of House Document 328
(Original Exhibit)

COMPLAINANTS' EXHIBIT No. 914

Defendants' Exhibit No. 30 in Ashwander et al. v. Tennessee Valley Authority et al.
(Original Exhibit)

COMPLAINANTS' EXHIBIT No. 915

Defendants' Exhibit No. 31 in Ashwander et al. v. Tennessee Valley Authority et al.
(Original Exhibit)

[fol. 3976] COMPLAINANTS' EXHIBIT No. 916

Discharge Below Norris Dam Taken from T.V.A. Operating Reports
1936

Date	Discharge	Date	Discharge	Date	Discharge
August	c.f.s.	September	c.f.s.	October	c.f.s.
6	1,900	1	3,000	1	1,970
7	1,830	2	3,970	2	3,100
8	1,760	3	5,080	3	2,050
Sun. 9	.....	4	5,400	Sun. 4	.....
10	1,680	5	20		
11	1,230	Sun. 6	.....	
12	210	Labor Day 7	.....	
13	200	8	3,930		
14	40	9	3,850		
15	3,170	10	3,950		
Sun. 16	.....	11	3,980		
17	2,370	12	5,100		
18	3,630	Sun. 13	.....	
19	3,680	14	5,200		
20	3,680	15	5,420		
21	3,530	16	5,140		
22	3,750	17	5,180		
Sun. 23	.....	18	5,380		
24	3,550	19	5,380		
25	5,350	Sun. 20	.....	
26	5,450	21	5,300		
27	6,200	22	6,500		
28	7,000	23	6,500		
29	6,300	24	5,500		
Sun. 30	.....	25	4,180		
31	3,820	26	4,140		
		Sun. 27	.....	
		28	5,300		
		29	5,340		
		30	4,360		

[fol. 3977] COMPLAINANTS' EXHIBIT No. 917

Existing and Proposed Low Dam Projects—Tennessee River

No.	Name of Project	Miles from Ohio R.	Lift Feet	Pool Elev. Feet	Composition of Dam
(Pool No. 52, Ohio R.)				302.0	
1	Reynolds Dam...	37.6	20.0	322.0	1500' (a); 1000' (b); 5300' (c)
2	Suck Bar.....	105.2	23.0	345.0	1500' (a); 500' (b); 6400' (c)
3	Wolf Island.....	191.7	16.0	361.0	1000' (a); 1200' (b); 2400' (c)
4	Parkers Landing.	219.75	33.0	394.0	1100' (a); 3000' (c)
5	Hd. Colbert Shoals.....	234.83	14.0	408.0	2650' (a); 3400' (c)
6	Lock & Dam No. 1 (1).....	256.9	9.6	417.6	Constructed—
7	Wilson Dam (2)...	259.4	87.5	505.1	Constructed—
8	Wheeler Dam....	274.9	30.9	536.0	5820' (a)
9	Milton Bluff.....	288.0	8.0	544.0	3750' (a); 5380' (c)
10	Triana.....	320.8	16.0	560.0	1500' (a); 8400' (c)
11	Buck Island.....	362.6	25.0	585.0	1500' (a); 2900' (c)
12	Widows Bar.....	407.6	9.0	594.0	1340' (a); 3600' (c)
13	Hales Bar (3)....	431.1	35.2	629.2	Constructed—
14	Sherman Hill....	468.6	13.8	643.0	1300' (a); 8000' (b); 1500' (c)
15	U. S. Quarry....	485.25	21.0	664.0	1300' (a); 5400' (c)
16	Kelly Shoals....	510.8	19.0	683.0	1200' (a); 1500' (b); 1800' (c)
17	White Creek.....	543.3	32.0	715.0	1400' (a); 1400' (c)
18	Seven Islands....	574.8	31.0	746.0	1700' (a); 2800' (c)
19	Bussell Shoals...	603.6	32.0	778.0	30-30' x 14' Stoney Gates; 750' (c)
20	Georges Branch..	630.3	28.0	806.0	15-60' x 20' Tainter Gates; 700' (c)

(1) Constructed, to be raised.

(2) Double lift, constructed.

(3) Single lift, constructed 60' x 360' Locks above Wilson Dam; 110' x 600' Locks below Wilson Dam.

Notations for Composition of Dams:

(a) Fixed Concrete Overflow Dam.

(b) Overflow Earth Dam Heavily Riprapped.

(c) Non-Overflow Earth Dam Riprapped.

COMPLAINANTS' EXHIBIT NO. 918

Sheet 1

DIVISION OF ELECTRICAL DEVELOPMENT
DEPARTMENT OF ELECTRICITY
TENNESSEE VALLEY AUTHORITY

Chattanooga, Tennessee
January 1, 1936

RURAL ELECTRIFICATION SURVEY

Neighborhood Plan

Instructions to County Chairmen

GENERAL

The following pages outline a suggested "Neighborhood Plan" for conducting rural electrification surveys. It is intended that the plan shall be simple, clear cut and practical, so that interested local groups such as the Farm Bureaus may conduct their own surveys, and thus save considerable time and expense in finding out if rural lines are practical in their area.

This plan is not arbitrary or final. Minor changes may be made to fit local conditions. Therefore, before starting the survey it is desirable for the local Chairman or Committee to arrange a meeting with the nearest representative of the TVA's Department of Electricity. (His name and address can be obtained by writing to the Division of Electrical Development, Old Post Office, Chattanooga, Tenn.). He will then be able to answer questions, and assist with plans for your survey.

SURVEY MATERIAL

It is first suggested that you read carefully the material contained in this Manual.

As explained in the "Information Sheet" (Sheet 2), the main emphasis of the plan is on the profitable use of electricity by the consumer. Naturally rural lines cannot be built unless there is enough business or revenue to make the line self-supporting. But instead of the "old-fashioned" methods of obtaining enough revenue through high rates or heavy line charges, or through cash contributions to the cost of the lines, this plan seeks to solve the problem in a way that will give the customer maximum profit and pleasure from

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As explained in the "Information Sheet" (Sheet 2), the main emphasis of the plan is on the profitable use of electricity by the consumer. Naturally rural lines cannot be built unless there is enough business or revenue to make the line self-supporting. But instead of the "old-fashioned" methods of obtaining enough revenue through high rates or heavy line charges, or through cash contributions to the cost of the lines, this plan seeks to solve the problem in a way that will give the customer maximum profit and pleasure from his electric service. Rates are low. There are no line charges. The farmer is not asked to buy any stock or to make any cash contributions for poles or lines or transformers.

Instead of all these outlays, the farmer is asked only to share in the program by agreeing to install such electric equipment on his own farm as he needs and can afford. Thus his money stays at home and works for him on his farm.

-2-

By experience, the average electric use (in kilowatt hours) of most types of equipment is pretty well known (see Information Sheet, page 1), and so, after the farmers have indicated (on Sheet 3) what equipment they agree to buy, it is possible to estimate the use of this equipment, add up the total for any given extension, and see if the revenue from this much use will be enough to justify the cost of the line.

There is no fixed rule as to what is "enough business." This will vary, depending on the cost of the line and other factors. However, experience in other communities in the Tennessee Valley has shown that lines are generally feasible when customers agree to install enough equipment to use an average of 662 kilowatt hours per month per mile of line; and where surveys reach this total, it has in most cases been possible to arrange for construction of the lines either through TVA or the Rural Electrification Administration. In over 20 counties of Tennessee, Alabama, and Mississippi rural lines have been built or are under construction to serve farmers and in most cases they have been surveyed by this Neighborhood Plan, using the objective of 662 kilowatt hours per month per mile of line. It is generally agreed that this plan is more practical and workable than any other previously attempted. But it should be pointed out that its success must always depend on two things: 1. An active and enthusiastic committee of volunteer canvassers; 2. An understanding, by the farmers, of the many profitable uses of electricity on the farm.

The last point is the most important. Many farmers still think of electricity as "lights and radio." If this is all they use, then no project can ever be successful. The main job of the committee and canvassers is an educational job, explaining the many money-making and money-saving uses of electricity on the farm, so that the farmers will gladly sign up for enough equipment to reach the objective.

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PROCEDURE

In preparing for a survey the following supplies are required:

1. One large County Map
2. One Chairman's Manual.
3. One Information Sheet per customer (Sheet 2).
4. One Customer's Application Agreement per customer (Sheet 3).
5. One Canvasser's Mileage Sheet per 8 customers (Sheet 4).

The county map must be obtained locally. Samples of other forms are attached, and additional copies may be obtained by application to the address given on the preceding page. In estimating the number required, the following considerations should be kept in mind: (1)

for extensions to areas immediately adjacent to existing rural lines furnishing TVA power, any number of applicants may be considered provided the proposed extensions meets the necessary requirements per mile of line; (2) in areas calling for the formation of a separate county power association, it is wise to plan for at least 400 or 500 customers along not more than 70 or 80 miles of line.

In organizing the survey, it is first recommended that the Canvassers or Committee Members be called together by the Chairman, and that a TVA representative be present to answer questions and explain details. The areas to be surveyed should then be blocked out, and one area assigned to each Canvasser, who should be given an adequate supply of Information Sheets (Sheet 2), Customer Application Agreements (Sheet 3) and Canvasser's Mileage Sheets (Sheet 4). Full instructions should be given and a definite date set, at which time Canvassers should report back and turn in the completed Agreements to the Chairman. Then call in the TVA representative to determine feasibility of the project. Where feasible projects have been prepared, he can then outline the necessary legal, financial and engineering steps which must be taken for final action.

Notes: For the sake of brevity, this review omits discussion of several details which are apt to vary in different areas. These should be discussed with the TVA representative and carefully explained to the Canvassers, covering particularly the following matters:

1. Proposed source of energy supply.
2. Proposed method of organization.
3. Policy on computing customer tap lines over 200 feet in length.
4. Policy on surveying areas served in part by existing lines.

Emphasis must be placed on the need for thorough instruction on the uses of electricity. Canvassers should be grounded on all the facts contained in the Information Sheet and instructed to review these sheets with each customer. Much help can be obtained from local electrical dealers and contractors who will be glad to display equipment and discuss cost of house wiring and appliances, and from the County Agents, Home Agents, and others who can discuss the uses and applications of electric service at their regular meetings or classes. A two-reel TVA moving picture on "Electricity on the Farm" is now available for such meetings and other material may also be obtained on request.

COMPLAINANTS' EXHIBIT No. 918

TVA 189 DE

RURAL ELECTRIFICATION SURVEY

Sheet 3

No. _____

Neighborhood Plan

Customer's Application Agreement

(To be filled out in duplicate, one copy for Canvasser; carbon copy to be left with Customer)

To: _____ Date: _____

I hereby agree properly to wire my premises and to use TVA power thereon. I also agree to make valid contracts for the purchase of the following electrical appliances:

Appliance	Est. KWH per mo.	Other Appliances*	Est. KWH* per mo.
____ Lts. & Small Appl.	30	_____	_____
____ Refrigerator	50	_____	_____
____ Range	150	_____	_____
____ Water Pump	50	_____	_____
____ Water Heater	200	_____	_____

I understand that this agreement is conditioned on the availability of electric services at my premises, and I shall be under no obligation for wiring or the purchase of appliances unless and until such service becomes available.

Signed: _____

Address: _____

Telephone: _____

*NOTE: See page 1 of Information Sheet for a list of other farm appliances, together with information about prices, operating costs and time purchase plans.

COMPLAINANTS' EXHIBIT No. 918

TVA 231 DE

Sheet 4

RURAL ELECTRIFICATION SURVEY

Neighborhood Plan

Canvasser's Mileage Sheet

This sheet is to be filled out by each Canvasser while he is travelling his route. This must be done to assist the engineers in laying out the line for construction.

How to Proceed: Start at bottom of the sheet and work up. Enter speedometer reading for "Starting Point" in Column 4. Then enter every home, giving mileage in Column 4, and posting name of resident to right or left, according to their location along the road. List all residents, but enter Application Numbers only for those who have actually signed Sheet 3. For each resident indicate the approximate distance from the center of the road in yards.

Yds.			Speedom-		Yds.
from App.	Customers on LEFT	eter	Customers on RIGHT	App. from	
<u>Road No.</u>	<u>(List signers & non-signers)</u>	<u>Reading</u>	<u>(List signers & non-signers)</u>	<u>No.</u>	<u>Road</u>

tion.

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Yds.			Speedom-			Yds.
from App.	Customers on LEFT		eter	Customers on RIGHT	App. from	
Road No.	(List signers & non-signers)	Reading	(List signers & non-signers)	No.	Road	

Speedometer at Starting Point:

Starting Point:

Canvasser _____

Date _____

Address _____

Telephone _____

Start Here

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3938

TVA 190 DE

COMPLAINANTS' EXHIBIT No. 918

Sheet 5

RURAL ELECTRIFICATION SURVEY

Neighborhood Plan

Summary Sheet

(Note: This sheet is included for information only. Unless otherwise stated, it will be filled out by the TVA Commercial Checker from the information in Sheets 3 and 4)

Projected Primary Extension _____

County _____

From: _____

To: _____

Description: _____

Canvasser: _____

Address: _____

Telephone _____

Date of Original Request: _____

, 193 _____

Approx. Miles of Line: _____

KWH Req'd. _____

App.

No.

Name

Rate

L. Ref. R. W.H. P.

30

50

150

200

50

Other*

Total

Projected Primary Extension _____

County _____

From: _____

To: _____

Description: _____

Canvasser: _____

Address: _____ Telephone _____

Date of Original Request: _____, 193____

Approx. Miles of Line: _____ KWH Req'd. _____

App. No.	Name	Rate	L. 30	Ref. 50	R. 150	W.H. 200	P. 50	Other*	Total
-------------	------	------	----------	------------	-----------	-------------	----------	--------	-------

Totals - Forward

NOTE: Column headings indicate: L - Lights; Ref. - Refrigerator; R - Range;
W.H. - Water Heater; P - Water Pump.

Mark thus: ☒ indicates appliance agreed upon.

X indicates contingent contracts reported.

*For Details of "Other" Equipment, see Customer Application Agreement (Sheet 3)

Sheet _____ of _____

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3983

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TRADE MARK 

22



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3

8

-6

9



2

5

6

RURAL ELECTRIFICATION SURVEY

Neighborhood Plan

Customer's Notice Form

After the Customer's Application Agreements (Sheet 3) have been received and tabulated on the Summary Sheet (Sheet 5) the TVA representative will then be able to advise you whether or not the project can be approved for construction. If approved, (see form below) notice should then be sent to all customers advising them of this decision and instructing them to complete valid contracts for wiring and the purchase of appliances, as agreed upon.

If desired, standard contract forms may be obtained from the TVA, or electrical dealers may use their own forms. In any event, however, the contracts should contain the following provision: "This contract is conditioned on the availability of electric service at my premises at _____ and I shall be under no obligation for wiring or the purchase of appliances unless and until such service becomes available."

Following is the suggested notice to be sent to customers after the Committee has finished its survey and completed negotiations for financing and constructing of lines:

_____, Tenn. _____, 193

Dear Sir:

We note with very much interest your willingness to cooperate with the _____ County Power Association and your neighbors in the extension of rural power lines in _____ County. We have checked your petition and are pleased to advise that this line will be constructed when you and the other residents in this district complete contracts for house wiring and appliances as mentioned in your agreement of _____, 193_____.

After the Customer's Application Agreements (Sheet 3) have been received and tabulated on the Summary Sheet (Sheet 5) the TVA representative will then be able to advise you whether or not the project can be approved for construction. If approved, (see form below) notice should then be sent to all customers advising them of this decision and instructing them to complete valid contracts for wiring and the purchase of appliances, as agreed upon.

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Following is the suggested notice to be sent to customers after the Committee has finished its survey and completed negotiations for financing and constructing of lines:

_____, Tenn. _____, 193

Dear Sir:

We note with very much interest your willingness to cooperate with the _____ County Power Association and your neighbors in the extension of rural power lines in _____ County. We have checked your petition and are pleased to advise that this line will be constructed when you and the other residents in this district complete contracts for house wiring and appliances as mentioned in your agreement of _____, 193_____.

If the line extension is not made your contracts with dealers and wiring contractors will not be binding. *

Assuring you of our cooperation, we are,

COUNTY POWER ASSOCIATION

*NOTE: Equipment to be purchased under your agreement is as follows:

COMPLAINANTS: EXHIBIT No. 918

EASEMENT

FOR AND IN CONSIDERATION of the mutual advantage to be derived from the construction of a Rural Distribution Line, and other good and valuable considerations, receipt of which is hereby acknowledged, the undersigned, _____

hereby grant unto the _____ a permanent easement and right of way through my or our property for the purpose of entering, erecting, maintaining, and operating a Rural Distribution Line, including all other distribution structures upon, under, across the following described land, lying in the _____ Civil District, _____ County, _____, more particularly described as follows to-wit:

TO HAVE AND TO HOLD the said easement and right of way to the said _____, its successors and assigns.

IN WITNESS OF all of which _____ have hereunto subscribed name on this the _____ day of _____, 193____,

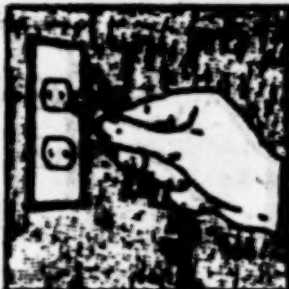
STATE OF _____)
COUNTY OF _____) ss:

Personally appeared before me, _____
a Notary Public, in and for said County and State, _____

the within named bargainer _____, with whom I am personally acquainted and

of \$15.00 to the cost of three-wire service as soon as the range or water heater is actually installed. Thus, if you are planning a range or water heater, it will be cheaper to start off with three-wire service.

5. Wiring must conform to the standards and specifications of the National Board of Fire Underwriters, or such equivalent standards as may be set by your Municipality or Association. The service entrance, or place where the wires enter the house, must be made according to TVA specifications, available from your Municipality or Association.



When you wire, have plenty of these "convenience outlets" for your appliances.

Finance Plans:

In planning your house wiring and purchase of equipment, you can be greatly assisted by the finance plans which help you pay off this expense in small amounts over a period of years. In some cases these payments are made monthly, in others seasonally at the time of your crop returns.

Your local Committee or County Agent can give full details about the finance plans which are available in your community. Principal agencies are as follows:

1. Electric Home and Farm Authority (EHFA). This agency has approved a number of electric appliances for financing

(EHFA). In this case money may be borrowed from a local bank, like any other loan, except that terms and rates are more liberal than ever before. FHA loans, up to \$2,000, may be obtained for all major electric equipment, and also to cover cost of wiring, plumbing, sinks, bathrooms, etc., and other modernization, such as built-in kitchen cabinets. There is no down payment (except on refrigerator, washing machine and ironer), loans may extend up to three years, and repayments may be made monthly or seasonally. See your local banker for details.

3. Production Credit Corporations. These are maintained in many areas and are often willing to assist in financing loans for wiring and equipment for farm users. Terms are generally similar to those for FHA. Full details may be obtained from the local County Agent or Farm Bureau.

4. Private Agencies. In addition to the above plans, there are a number of liberal finance plans maintained by private finance companies. Full details may be obtained from local dealers and mail order houses. However, customers should always check up to obtain the best terms and interest rates.

To see how these plans make it possible to spread out the cost of appliances, note the following examples, at EHFA rates:

<u>Appliance</u>	<u>Cash Price</u>	<u>Minimum Down Payment</u>	<u>Minimum Monthly Payment</u>
1. Refrigerator	\$ 79.50	\$3.50	\$2.54
2. Range	74.50	3.50	2.38
3. Water Heater	60.00	3.00	2.27
4. Range and Refrigerator	154.00	5.00	3.83
5. All Three	214.00	6.00	5.30

by acknowledged, the undersigned, _____

hereby grant unto the _____ a permanent easement
and right of way through my or our property for the purpose of
entering, erecting, maintaining, and operating a Rural Distribution
Line, including all other distribution structures upon, under, across
the following described land, lying in the _____ Civil
District, _____ County, _____, more particularly
described as follows to-wit:

TO HAVE AND TO HOLD the said easement and right of way to the
said _____, its successors and assigns.

IN WITNESS OF all of which _____ have hereunto subscribed _____
name on this the _____ day of _____, 193____,

STATE OF _____)
COUNTY OF _____) ss:

Personally appeared before me, _____
a Notary Public, in and for said County and State, _____

the within named bargainer _____, with whom I am personally acquainted and
who acknowledged that _____ executed the within instrument for the
purpose therein contained.

Witness my hand and seal of office in _____
this the _____ day of _____, 193____.

Notary Public

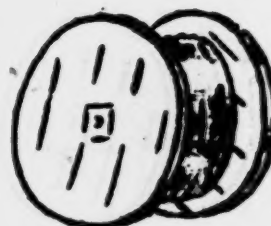
My commission expires _____.



RURAL ELECTRIFICATION SURVEY

Neighborhood Plan

Information Sheet

Farm Uses of Electricity:

There are several hundred practical uses for electricity on the farm, and many of these will help to make money or save money on the farm. A few of the main farm and home uses are indicated below, with estimates of the

amount of power they will use and approximate cost of equipment. These estimates, of course, represent averages only. The actual cost and operating expense will vary more or less depending on the size and type of equipment.

NAME OF EQUIPMENT	ENERGY CONSUMPTION	APPROXIMATE COST
Dairy Equipment		
Bottle Washer	1/3 KWH per 1,000 bottles	\$7.50 to \$60
Cream Separator	1/2 KWH per 1,000 lbs. milk	\$50 to \$150
Milking Machine	60 KWH per mo. per 25 cows	\$30 up
Sterilizer	6 KWH per day per 25 cows	\$150 up
Water Heater	10 KWH per day per 25 cows	\$46.50 to \$68.25*
Dairy Refrigeration	1 KWH per day per 10 gals.	\$240 to \$675
Churn	2 KWH per 100 lbs. milk	\$20 to \$75
Poultry Equipment		
Incubator	1/4 KWH per chick hatched	\$10 up
Brooder	1/2 to 1 KWH per chick (season)	\$6.50 up
Poultry Lights	20 KWH per year per 100 birds	\$4.50 up per 100 birds
Meal and Feed		
Ensilage Cutter	1 KWH per ton	\$50 to \$400
Meal and Feed Grinder	1/2 KWH per bushel	\$8 up
Sausage Grinder	1/2 KWH per 100 lbs. meat	\$4 to \$10
Hay Baler	2 KWH per ton	\$300 to \$600
Miscellaneous		
Large Meat Box Refrigerator	240 KWH per mo.	\$400 to \$1,000
Electric Hotbeds	1/2 to 1 KWH per day per sq.yd.	\$10 to \$20 per 6'x12' bed
Irrigation	2 KWH per acre inch per 10 ft. lift	\$10 up per acre
Farm Motors	1 KWH per H.P. per hr.	\$6 to \$270
Household		

First	50 KWH	@ 3¢
Next	150 "	@ 2¢
Next	200 "	@ 1¢
Next	1000 "	@ 0.4¢
All over	1400 "	@ 0.75¢

Minimum residential bill is \$0.75 per month and entitles the customer to use 25 KWH per month.

This rate is subject to an amortization charge of one cent (1¢) per KWH for the first 100 KWH used per month, such charge to be not less than \$0.25 nor more than \$1.00 per customer per month. This charge is kept separate and used to pay off the cost of the lines. When lines are paid for, the charge is eliminated.

churches, schools, grist mills, warehouses, tourist camps, hotels, signs, cold storage plants and small factories up to 10 h.p.

First	25¢ KWH	@ 3¢
Next	750 "	@ 2¢
Next	1000 "	@ 1¢
Excess over	2000 "	@ 0.8¢

Minimum commercial bill is \$1.00 and entitles the customer to use 35 KWH per month.

This rate is subject to a developmental surcharge of 10% of net monthly bills, and to an amortization charge of one cent (1¢) per KWH for the first 100 KWH used per month, such charge to be not less than \$0.25 nor more than \$1.00 per customer per month.

Operating Costs:

Kilowatt hours are the unit of measure for electricity just as gallons are the unit for water or bushels are the unit for wheat. The table on page 1 shows about how many of these kilowatt-hour units are used by the different appliances. Table A above shows how much electricity costs per unit. With this information it is now easy for you

to check off the equipment you want and figure just what will be the monthly operating cost of your equipment as shown in the examples below. In figuring the cost of power to you, be sure to compare the cost with what you are now spending in labor or cash for your present form of cooking, refrigeration, water pumping, etc.

HOW TO FIGURE OPERATING COSTS

Appliance	KWH Used Per Mo.	Electric Bill	Amortization Charge	Total
Lights and Small Appliances (Fan, Iron, Radio, etc.)	30 KWH	\$.90	\$.30	\$1.20
Lights and Refrigerator	80 "	2.10	.80	2.90
Lights and Pump	80 "	2.10	.80	2.90
Lights, Refrigerator and Pump	150 "	3.10	1.00	4.10
Lights, Refrigerator, Pump, and Range	280 "	5.30	1.00	6.30
Lights, Refrigerator, Pump, Range and Water Heater	480 "	6.82	1.00	7.82

For further information, write

TVA, Division of Electrical Development, Old Post Office, Chattanooga, Tennessee

cal uses for electricity on the farm, and many of these will help to make money or save money on the farm. A few of the main farm and home uses are indicated below, with estimates of the

imate cost of equipment. These estimates, of course, represent averages only. The actual cost and operating expense will vary more or less depending on the size and type of equipment.

NAME OF EQUIPMENT	ENERGY CONSUMPTION	APPROXIMATE COST
Dairy Equipment		
Bottle Washer	1/3 KWH per 1,000 bottles	\$7.50 to \$80
Cream Separator	1/2 KWH per 1,000 lbs. milk	\$50 to \$150
Milking Machine	60 KWH per mo. per 25 cows	\$30 up
Sterilizer	6 KWH per day per 25 cows	\$150 up
Water Heater	10 KWH per day per 25 cows	\$46.50 to \$68.25*
Dairy Refrigeration	1 KWH per day per 10 gals.	\$240 to \$675
Churn	2 KWH per 100 lbs. milk	\$20 to \$75
Poultry Equipment		
Incubator	1/4 KWH per chick hatched	\$10 up
Brooder	1/2 to 1 KWH per chick (season)	\$6.50 up
Poultry Lights	20 KWH per year per 100 birds	\$4.50 up per 100 birds
Meal and Feed		
Ensilage Cutter	1 KWH per ton	\$50 to \$400
Meal and Feed Grinder	1/2 KWH per bushel	\$8 up
Sausage Grinder	1/2 KWH per 100 lbs. meat	\$4 to \$10
Hay Baler	2 KWH per ton	\$300 to \$600
Miscellaneous		
Large Meat Box Refrigerator	240 KWH per mo.	\$400 to \$1,000
Electric Hotbeds	1/2 to 1 KWH per day per sq.yd.	\$10 to \$20 per 6'x12' bed
Irrigation	2 KWH per acre inch per 10 ft. lift	\$10 up per acre
Farm Motors	1 KWH per H.P. per hr.	\$6 to \$270
Household		
Room Lights	5 KWH per room per mo.	\$15 per room
Radio	10 KWH per mo.	\$10 up
Washing Machine	2 KWH per mo.	\$40 up
Electric Iron	6 KWH per mo.	\$1 up
Electric Fan	2 KWH per mo.	\$1 up
Hot Plate	20 KWH per unit	\$1 up
Sewing Machine	6 KWH per mo.	\$50 up
Vacuum Cleaner	6 KWH per mo.	\$20 to \$75
Refrigerator	50 KWH per mo.	\$72.50 to \$79.50*
Range	150 KWH per mo.	\$62.85 to \$77.75*
Water Pump--Deep Well	50 KWH per mo.	\$84.25 to \$140*
Water Pump--Shallow Well	50 KWH per mo.	\$52.50 to \$68.25*
Air Heater	50 KWH per KW per mo.	\$8 up
Water Heater	200 KWH per mo.	\$46 up

*Prices for EHFA "approved" models.

How The Survey Works:

This survey plan has been developed because it offers an easy, rapid way for farmers to survey their own rural electric lines and arrange for construction.

Due to various government agencies, it is now easier to develop rural electrification projects than ever before.

Through the Tennessee Valley Authority (TVA) or the Rural Electrification Administration (REA), your association or municipality can obtain funds for line construction without any financial liability to you either as a taxpayer or a customer.

Through other agencies (described on next page) it is possible to obtain loans for house wiring and the purchase of appliances on easier and more liberal terms than ever before.

But in spite of these great advantages, there still remain certain problems, and you must understand these thoroughly if your project is to be successful.

First of all, rural lines must be self-supporting. That means that each line must have a certain amount of business before the Government can afford to advance the money to build it.

The Government does not ask customers to put up large sums of money for line construction (that was the old method of rural electrification). It does not ask you to pay any heavy "line charges" or "monthly guarantees" or to assume any financial liability for the operation of the system.

On the other hand, it does ask you and your neighbors to see that there is enough business to make it possible for your line to pay its own way, gradually over a period of years.

liberal than any other plan previously developed. Instead of spending money for poles and transformers, the money you spend goes into labor-saving equipment for your own farm. If this equipment is selected wisely, it will, in many cases, help to make enough money, or save enough, to take care of the cost of electricity on the farm. This is especially true in view of the low TVA rates, and the low finance terms which now exist for the purchase of equipment.

Below will be found answers to some of the questions that will occur in planning for electric service on the farm.

Cost of House Wiring:

If your home is already wired for Delco lights, the wiring will normally be satisfactory, requiring only the addition of a service entrance switch and connections, costing between \$5.00 and \$15.00.

If your home is not wired, this can be done by a reliable local electrician. In addition to the entrance switch (\$5.00 to \$15.00), wiring usually costs \$2.00 to \$3.00 per outlet. (Each switch, convenience outlet, or light receptacle counts as one outlet.) In planning your wiring remember these points:

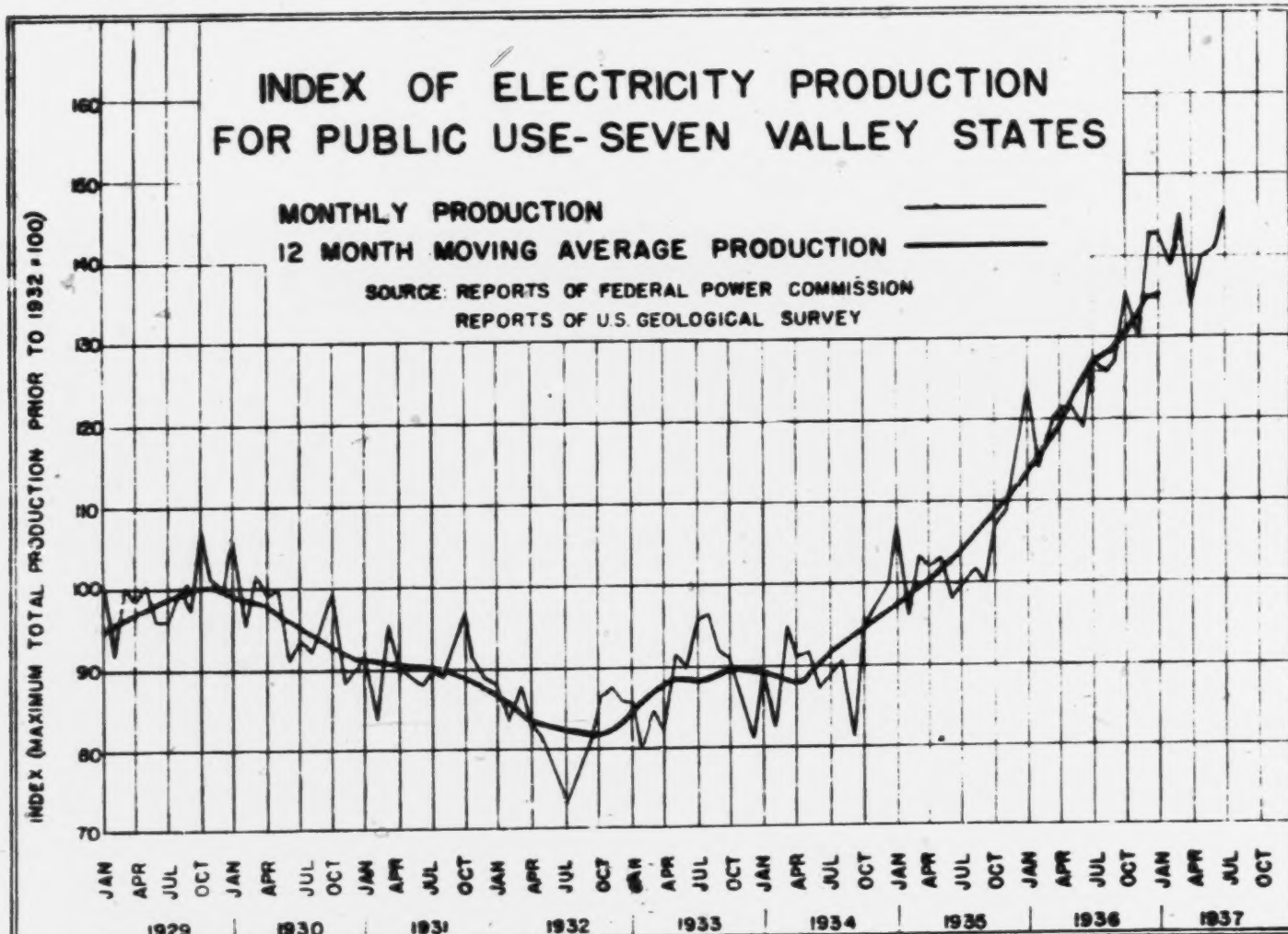
1. Specify adequate wire to supply your equipment. (No wire lighter than #12 gauge for 110 volt circuits.)

2. Provide enough convenience outlets or wall plugs for all the equipment you will want to use.

3. Avoid "drop cords" and unshaded light bulbs which cause



Area	PRODUCTION DURING MONTH			AVERAGE DAILY PRODUCTION			PRODUCTION 12 MONTHS TO DATE	
	Total	Per Cent Hydro	Per Cent Fuel	Thousands KWH	Change From		Thousands KWH	Chge. fr. Prev. Yr.
	Thousands KWH				Prev. Month	Prev. Year		
Alabama	235,674	63%	37%	7,602	-2.4%	-3.3%	2,858,505	20.9%
Georgia	129,056	59	41	4,163	-8.7	12.4	1,629,652	11.7
Kentucky	90,698	45	55	2,926	5.7	27.7	858,256	13.3
Mississippi	6,791	0	100	219	25.9	10.5	72,941	20.6
North Carolina	277,760	67	33	8,960	-1.4	20.8	3,084,385	15.3
Tennessee	163,188	52	48	5,264	7.6	43.6	1,690,983	29.9
Virginia	148,867	14	86	4,802	-0.7	8.2	1,711,467	21.1
Valley States - TOTAL	1,052,033	53%	47%	33,936	-0.5%	14.7%	11,906,199	17.5%
United States less Valley States	9,673,953	31	69	308,837	-0.8	9.4	106,087,801	9.5
United States - TOTAL	10,625,986	33%	67%	342,773	-0.8%	9.9%	117,994,000	10.3%



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On the other hand, it does ask you and your neighbors to see that there is enough business to make it possible for your line to pay its own way, gradually over a period of years.

What is "enough business"? There is no ready-made answer. But as a general rule, other communities have found that it is practical to build rural lines at low TVA rates when the customers install enough equipment to use an average of 662 kilowatt hours per month per mile of line. Thus, if there were four customers, each would agree to install equipment which would use 165 kilowatt hours per month.

This is the customers' obligation under the plan, and authorities have agreed that it is more practical and

rates, and the low finance terms which now exist for the purchase of equipment.

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1. Specify adequate wire to supply your equipment. (No wire lighter than #12 gauge for 110 volt circuits.)

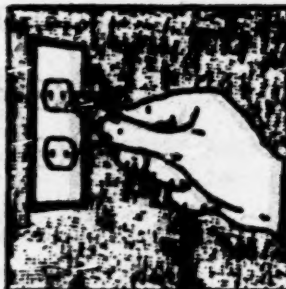
2. Provide enough convenience outlets or wall plugs for all the equipment you will want to use.

3. Avoid "drop cords" and unshaded light bulbs which cause glare and eye strain. Shaded lights are best. Inexpensive "kitchen units" are available with enclosed globe and a cord which combines a switch and outlet for your iron, percolator, etc., thereby eliminating wiring cost for a convenience outlet.



4. Consider right at the start the wisdom of installing "three-wire" service (suitable for range, water heater, air heater, etc.) rather than "two-wire" service (suitable for lights and small appliances only). Two-wire service entrances are a little cheaper. On the other hand, they give you less service. Also, in most cases, the local county power association makes a contribution of \$15.00 to the cost of three-wire service as soon as the range or water heater is actually installed. Thus, if you are planning a range or water heater, it will be cheaper to start off with three-wire service.

5. Wiring must conform to the standards and specifications of the National Board of Fire Underwriters, or such equivalent standards as may be set by your Municipality or Association. The service entrance, or place where the wires enter the house, must be made according to TVA specifications, available from your Municipality or Association.



When you wire, have plenty of these "convenience outlets" for your appliances.

Finance Plans:

In planning your house wiring and purchase of equipment, you can be greatly assisted by the finance plans which help you pay off this expense in small amounts over a period of years. In some cases these payments are made monthly, in others seasonally at the time of your

including: range, refrigerator, water heater, pump, motor, dairy cooler, cream separator, vacuum cleaner, washer, and kitchen heater. Models may be bought from approved local dealers with a small down payment, and small monthly payments on your electric bill, which may extend for as much as 48 months where two or more major items are purchased.

2. Federal Housing Administration (FHA). In this case money may be borrowed from a local bank, like any other loan, except that terms and rates are more liberal than ever before. FHA loans, up to \$2,000, may be obtained for all major electric equipment, and also to cover cost of wiring, plumbing, sinks, bathrooms, etc., and other modernization, such as built-in kitchen cabinets. There is no down payment (except on refrigerator, washing machine and ironer), loans may extend up to three years, and repayments may be made monthly or seasonally. See your local banker for details.

3. Production Credit Corporations. These are maintained in many areas and are often willing to assist in financing loans for wiring and equipment for farm users. Terms are generally similar to those for FHA. Full details may be obtained from the local County Agent or Farm Bureau.

4. Private Agencies. In addition to the above plans, there are a number of liberal finance plans maintained by private finance companies. Full details may be obtained from local dealers and mail order houses. However, customers should always check up to obtain the best terms and interest rates.

To see how these plans make it possible to spread out the cost of appliances, note the following examples, at EHFA rates:

<u>Appliance</u>	<u>Cash Price</u>	<u>Minimum</u>	<u>Minimum</u>
		<u>Down Payment</u>	<u>Monthly Payment</u>

TVA Rates:

All customers should be familiar with TVA rates schedules so that they can take full advantage of the economies offered.

Following are the schedules for Residential and Commercial Users:

Table A RESIDENTIAL RATESFor Homes and Farms

First	50 KWH	@ 3¢
Next	150 "	@ 2¢
Next	200 "	@ 1¢
Next	1000 "	@ 0.4¢
All over	1400 "	@ 0.75¢

Minimum residential bill is \$0.75 per month and entitles the customer to use 25 KWH per month.

This rate is subject to an amortization charge of one cent (1¢) per KWH for the first 100 KWH used per month, such charge to be not less than \$0.25 nor more than \$1.00 per customer per month. This charge is kept separate and used to pay off the cost of the lines. When lines are paid for, the charge is eliminated.

Table B COMMERCIAL RATES

For all stores, filling stations, churches, schools, grist mills, dairies, tourist camps, hotels, signs, cold storage plants and small factories up to 10 h.p.

First	25¢ KWH	@ 3¢
Next	750 "	@ 2¢
Next	1000 "	@ 1¢
Excess over	2000 "	@ 0.8¢

Minimum commercial bill is \$1.00 and entitles the customer to use 35 KWH per month.

This rate is subject to a developmental surcharge of 10% of net monthly bills, and to an amortization charge of one cent (1¢) per KWH for the first 100 KWH used per month, such charge to be not less than \$0.25 nor more than \$1.00 per customer per month.

Operating Costs:

Kilowatt hours are the unit of measure for electricity just as gallons are the unit for water or bushels are the unit for wheat. The table on page 1 shows about how many of these kilowatt-hour units are used by the different appliances. Table A above shows how much electricity costs per unit. With this information it is now easy for you

to check off the equipment you want and figure just what will be the monthly operating cost of your equipment as shown in the examples below. In figuring the cost of power to you, be sure to compare the cost with what you are now spending in labor or cash for your present form of cooking, refrigeration, water pumping, etc.

COMPLAINANTS' EXHIBIT NO. 919

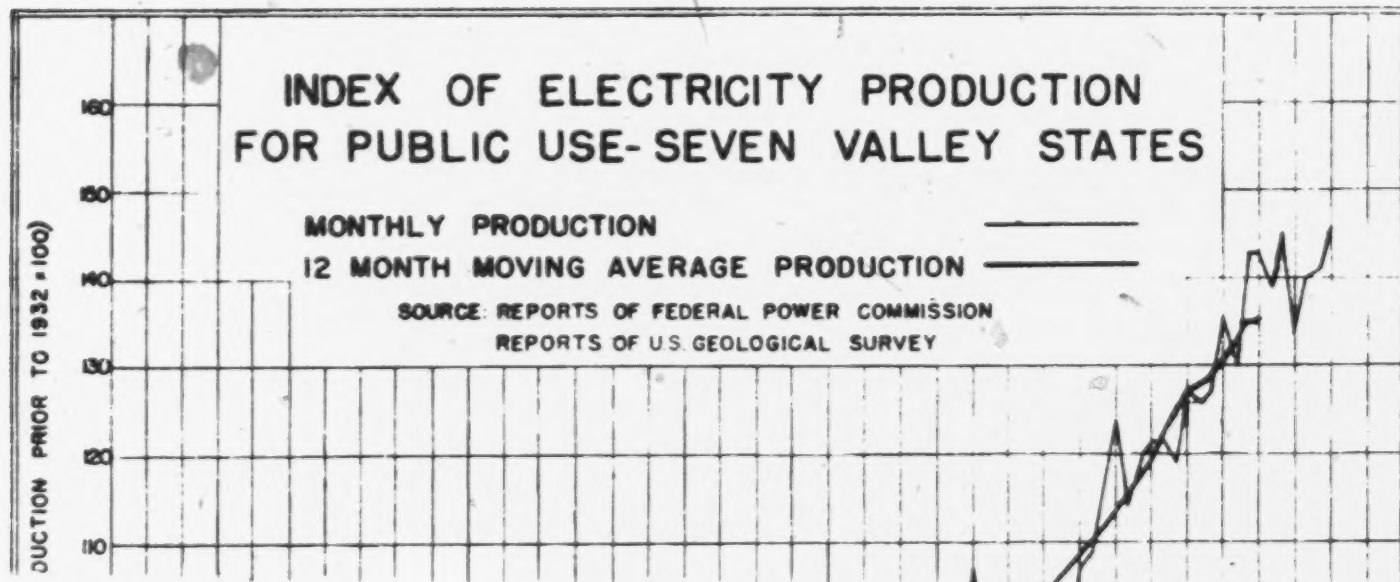
Tennessee Valley Authority
Department of Operations

Monthly Report No. 30
Issued Sept. 15, 1937

PRODUCTION OF ELECTRICITY FOR PUBLIC USE IN THE TENNESSEE VALLEY STATES AND IN THE NATION MONTH OF JULY, 1937 - PRELIMINARY REPORT

Production in Thousands of Kilowatt Hours

Area	PRODUCTION DURING MONTH			AVERAGE DAILY PRODUCTION			PRODUCTION 12 MONTHS TO DATE	
	Total	Per Cent Hydro	Per Cent Fuel	Thousands KWH	Change From		Thousands KWH	Chge.fr. Prev.Yr.
	Thousands KWH				Prev. Month	Prev. Year		
Alabama	235,674	63%	37%	7,602	-2.4%	-3.3%	2,858,505	20.9%
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Valley States - TOTAL	1,052,033	53%	47%	33,936	-0.5%	14.7%	11,906,199	17.5%
United States less Valley States	9,573,953	31	69	308,837	-0.8	9.4	106,087,801	9.5
United States - TOTAL	10,625,986	33%	67%	342,773	-0.8%	9.9%	117,994,000	10.3%



COMPLAINANTS' REPORT No. 919

Tennessee Valley Authority
Department of Operations

AUGUST - 1937
WHOLESALE PURCHASES BY
MUNICIPALITIES & COOPERATIVES

Monthly Report No. 30
Issued Sept. 15, 1937

CONTRACTOR	KW DEMAND			ENERGY -- KWH			WHOLESALE BILL--DOLLARS			MILLS	LOAD
	Month	No. of Prev. Yr.	Max. 12 Mos.	Month	Chge. fr. Prev. Yr.	12 Mos. To Date	Month	Chge. fr. Prev. Yr.	12 Mos. To Date	PER KWH Month	FACTOR Month
Municipalities											
Amory, Miss.	440	368	440	183,200	26%	1,761,600	\$ 1,031	20%	\$10,719	5.63	56%
Athens, Ala.	1,096	693	1,096	390,800	56	4,102,860	2,194	51	23,130	5.61	48
Bolivar, Tenn.	195	123	195	83,600	82	714,700	500	70	4,615	5.99	58
Dayton, Tenn.	408	392	408	170,400	12	1,767,200	964	7	10,516	5.66	56
Dickson, Tenn.	512	400	512	182,400	12	2,024,800	1,100	17	11,973	6.03	48
Florence, Ala.	2,556	2,048	2,556	1,070,400	25	11,598,241	4,604	22	51,573	4.30	56
Holly Springs, Miss.	264	232	344	114,400	27	1,297,600	669	18	8,028	5.84	58
Jackson, Tenn.	282	306	402	97,800	-26	1,481,400	645	-15	8,904	6.60	47
Milan, Tenn.	328	248	368	145,600	36	1,493,600	817	28	8,967	5.61	60
Muscle Shoals City, Ala.	78	66	144	31,200	15	459,514	188	15	2,736	6.04	54
New Albany, Miss.	801	653	801	303,890	28	3,265,342	1,720	24	18,256	5.66	51
Okolona, Miss.	606	564	624	209,100	60	1,833,445	1,266	27	11,297	6.05	46
Pulaski, Tenn.	816	696	816	304,000	17	3,104,000	1,733	16	18,180	5.70	50
Sheffield, Ala.	434	33	434	157,000	--	544,380	941	--	3,632	6.00	49
Somerville, Tenn.	141	99	177	63,900	95	612,600	374	70	3,940	5.85	61
Tupelo, Miss.	1,824	2,004	2,520	752,800	-12	10,479,100	3,726	-10	51,654	4.95	55
Tusculum, Ala.	680	--	680	244,000	--	--	1,286	--	--	5.27	48
Cooperatives											
Alcorn Co. EPA	1,622	1,399	2,132	659,800	14	8,561,200	3,321	14	42,447	5.03	55
Cullman Co. EMC	174	--	180	56,100	--	478,451	381	--	3,473	6.79	43
Duck River EMC	218	--	218	59,195	--	--	429	--	--	7.25	37
Gibson Co. EMC	446	72	454	134,360	--	871,020	898	--	6,697	6.68	40
Meigs Co. EMC	150	40	150	54,650	--	375,735	350	--	2,621	6.40	49
Middle Tenn. EMC	192	--	192	74,700	--	--	466	--	--	6.23	52
Monroe Co. EPA	340	240	500	80,800	64	932,200	628	52	7,914	7.77	32
No. Georgia EMC	360	60	360	122,400	--	931,035	787	--	6,399	6.43	46
Pickwick EMC	246	--	363	76,600	--	825,900	525	--	5,795	6.85	42
Pontotoc EPA	782	500	798	204,950	29	2,108,300	1,410	38	13,021	6.88	35
Prentiss Co. EPA	714	660	762	246,000	16	2,616,000	1,468	11	16,031	5.97	46
Southwest Tenn. EMC	246	--	246	59,400	--	--	466	--	--	7.68	33
Tishomingo Co. EPA	358	410	547	149,160	12	1,536,650	854	-1	9,511	5.72	56
Tombigbee EPA	1,208	562	1,712	306,000	16	3,357,900	2,094	54	20,519	6.84	34
MUNICIPALITIES	--	--	--	4,504,490	29	--	23,758	28	--	5.27	--
COOPERATIVES	--	--	--	2,284,115	60	--	14,067	73	--	6.16	--
TOTAL	--	--	--	6,788,605	39%	--	\$37,825	41%	--	5.57	--
ALABAMA DIVISION	--	--	--	1,949,500	--	--	9,594	--	--	4.92	--
MISSISSIPPI DIVISION	--	--	--	3,210,100	--	--	18,187	--	--	5.67	--
MIDDLE TENNESSEE DIVISION	--	--	--	967,745	--	--	5,829	--	--	6.02	--
WEST TENNESSEE DIVISION	--	--	--	661,260	--	--	4,215	--	--	6.37	--

DATA NOT FOR PUBLICATION

3991

COMPLAINANTS' EXHIBIT No. 919

Tennessee Valley Authority
Department of Operations

DISTRIBUTION OF ELECTRICITY
UNDER TVA RESALE RATES
AUGUST - 1937

Monthly Report No. 30
Issued Sept. 15, 1937

Number of Customers	TOTAL EXCL. GOVERNMENT RESERVATIONS				TOTAL OPERATIONS			
	Month	Chge. fr. Prev. Yr.	12 Months to Date	Chge. fr. Prev. Yr.	Month	Chge. fr. Prev. Yr.	12 Months to Date	Chge. fr. Prev. Yr.
Residential	26,247	55%	22,233 (Av)	95%	27,500	53%	23,366 (Av)	89%
Commercial	6,486	31	5,889 (Av)	67	6,619	22	6,002 (Av)	67
Industrial	104	39	--	--	110	33	--	--
Total	32,837	49%	--	--	34,229	48%	--	--
Kilowatt Hours								
Residential	2,790,352	69%	26,216,833	99%	3,055,378	62%	32,253,150	73%
Commercial	1,549,519	35	16,028,157	82	1,638,489	34	17,206,707	74
Industrial	2,365,408	21	30,106,156	123	2,453,458	19	31,281,424	111
Municipal	441,846	34	4,452,790	67	619,095	21	7,278,217	31
Total	7,147,125	40%	76,803,936	101%	7,766,420	37%	88,019,498	80%
Revenue								
Residential	\$ 58,256	65%	\$ 537,159	90%	\$ 62,900	61%	\$ 600,516	83%
Commercial	38,481	35	395,947	75	39,948	35	413,138	71
Industrial	22,220	25	295,476	101	23,153	23	307,468	91
Municipal	6,169	28	64,061	53	7,662	24	84,402	34
Total	\$ 125,126	45%	\$ 1,292,643	80%	\$ 133,663	43%	\$ 1,405,524	77%
Averages								
Residential								
KWH per Customer	106	9%	1,179	2%	111	6%	1,380	-8%
Revenue per KWH	2.09¢	-2	2.05¢	-1	2.06¢	-1	1.86¢	5
Revenue per Customer	\$2.22	7	\$24.16	1	\$2.29	6	\$25.70	-3
Commercial								
KWH per Customer	239	4	2,722	7	266	10	2,857	4
Revenue per KWH	2.48¢	0	2.47¢	-4	2.44¢	1	2.40¢	-2
Revenue per Customer	\$5.93	3	\$67.24	5	\$6.48	10	\$68.83	3
Industrial								
Revenue per KWH	.94¢	3	.98¢	-10	.94¢	-3	.98¢	-9
Municipal								
Revenue per KWH	1.40¢	-4	1.44¢	-8	1.24¢	2	1.16¢	3
Total - All Classes								
Revenue per KWH	1.75¢	3	1.68¢	-7	1.72¢	4	1.60¢	-1

DATA NOT FOR PUBLICATION

3992

Tennessee Valley Authority
Department of Operations

COMPLAINANTS' EXHIBIT No. 919

AUGUST - 1937

Monthly Report No. 30
Issued Sept. 15, 1937

RESIDENTIAL APPLIANCE STATISTICS

Municipalities	TOTAL APPLIANCE SALES			AV. SALES PER CUSTOMER			UNITS SOLD - AUGUST, 1937										EST. KWH ADDED	PER CENT SATURATION SEPT. 1, 1937		
	Aug.-37	July-37	Aug.-36	Aug.-37	July-37	Aug.-36	Ref.	Range	Water Hrs.	Pump	Space Hrs.	Wash.	Iron. Mch.	Misc.	Ref.	Range		W.H.		
Amory, Miss.	\$ 2,200	\$ 1,921	\$ 4,980	\$ 3.17	\$ 2.83	\$ 7.88	7	-	1	1	-	-	-	14	663	76%	5%	3%		
Athens, Ala.	1,157	6,061	1,571	0.92	4.84	2.07	2	-	-	-	-	4	-	21	150	72	31	12		
Bolivar, Tenn.	1,100	4,210	1,035	4.93	18.96	4.91	3	1	2	-	-	-	-	1	822	44	11	9		
Dayton, Tenn.	4,406	3,583	761	6.65	5.46	1.19	8	7	3	1	-	7	-	67	2,403	42	23	5		
Dickson, Tenn.	2,198	3,664	3,170	3.21	5.48	5.32	2	1	2	-	-	6	1	24	843	53	22	8		
Florence, Ala.	7,387	7,395	26,813	3.69	3.70	14.68	22	4	1	-	4	3	-	70	2,526	68	32	10		
Holly Springs, Miss.	1,414	2,400	1,274	3.15	5.44	3.44	3	2	2	-	-	-	-	7	984	54	12	12		
Milan, Tenn.	2,302	1,856	2,820	4.44	3.58	6.59	8	2	-	-	-	-	-	10	720	35	11	3		
Muscle Shoals City, Ala.	329	1,155	284	2.91	10.60	2.99	2	-	1	-	-	-	-	-	360	75	44	44		
New Albany, Miss.	2,441	4,137	2,880	2.02	3.45	2.70	7	-	1	-	-	-	-	48	706	69	20	6		
Okolona, Miss.	1,648	2,530	1,005	2.88	4.41	2.63	4	1	-	1	-	4	-	8	399	59	21	5		
Pulaski, Tenn.	2,749	1,335	4,787	3.57	1.76	7.17	9	3	6	-	-	-	-	26	2,512	50	30	12		
Sheffield, Ala.	7,544	3,091	--	4.15	*	--	25	9	3	-	-	4	-	29	3,446	*	*	*		
Somerville, Tenn.	948	561	1,337	5.45	3.16	9.48	3	1	-	-	-	-	-	13	326	58	16	10		
Tupelo, Miss.	3,026	8,016	6,994	2.04	5.44	5.70	13	2	-	-	2	-	-	30	1,080	86	25	8		
Tusculum, Ala.	3,749	3,220	--	4.64	3.99	--	10	7	4	-	-	-	-	8	2,606	43	28	10		
Cooperatives																				
Alcorn Co., Miss.	8,227	9,620	7,523	4.31	5.07	4.59	18	18	4	-	-	9	1	26	4,723	76	36	12		
Cullman Corp., Ala.	782	1,554	--	0.88	1.75	--	3	-	-	1	-	3	1	-	194	27	3	1		
Duck River Corp., Tenn.	11,936	4,432	3,138x	23.87	8.94	11.50x	44	22	6	10	-	6	-	18	7,358	52	22	4		
Gibson Corp., Tenn.	1,344	5,823	--	1.52	6.65	--	2	3	1	2	-	1	-	4	870	41	23	6		
Meigs Corp., Tenn.	8,599	4,591	2,685	15.19	8.47	24.63	13	6	2	4	-	10	-	180	2,550	31	11	3		
Middle Tenn. Corp., Tenn.	1,022	3,080	--	1.65	4.98	--	2	-	-	6	-	1	-	8	268	43	21	7		
Monroe Co., Miss.	373	872	1,579	1.26	2.94	6.93	1	1	1	-	-	-	-	-	460	61	9	2		
No. Georgia Corp., Ga.	9,698	7,856	--	6.82	5.58	--	27	8	2	6	-	16	-	17	3,286	28	7	1		
Pickwick Corp., Tenn.	1,112	2,484	1,162x	1.84	4.10	2.71x	4	1	-	-	-	3	-	1	358	48	10	2		
Pontotoc Assn., Miss.	3,629	3,347	1,801	4.62	4.31	2.69	7	8	4	1	-	2	-	53	2,725	61	17	8		
Prentiss Co., Miss.	4,701	4,062	2,353	6.62	5.76	3.78	12	10	1	-	-	3	1	36	2,451	80	36	12		
Southwest Tenn. Corp., Tenn.	36,735	20,453	--	109.33	86.67	--	97	56	26	17	-	4	-	91	20,625	50	22	10		
Tishomingo Co., Miss.	1,606	1,882	1,872	2.96	3.62	4.12	5	2	1	-	-	2	-	15	844	50	15	10		
Tombigbee Assn., Miss.	3,875	5,653	3,753	1.96	2.86	2.35	10	2	2	2	-	7	1	16	1,429	55	14	2		
Direct Operations																				
Alabama Power District	9,151	3,672	2,916	21.18	9.51	5.96	27	8	3	5	-	17	-	12	3,513	**	**	**		
Colbert Co., Ala.	2,084	1,315	2,797	4.81	2.86	15.28	2	5	1	1	-	6	3	9	1,204	**	**	**		
Lauderdale Co., Ala.	3,716	4,414	6,164	3.96	4.79	9.68	6	5	2	7	5	2	-	6	2,426	**	**	**		
Lincoln Corp., Tenn.	1,825	2,841	1,249	3.17	4.99	3.34	7	3	2	1	-	3	-	1	1,353	47	13	5		
TOTALS																				
MUNICIPALITIES	44,598	55,135	59,711	3.77	4.78	6.60	128	40	26	3	6	28	1	376	20,546	64%	24%	9%		
COOPERATIVES	93,638	75,709	21,566	7.77	6.39	3.89	245	137	50	49	-	67	4	465	48,141	51	18	6		
DIRECT OPERATIONS	16,776	12,242	17,426	7.05	5.24	7.29	42	21	8	14	5	28	3	28	8,496	--	--	--		
TOTAL	\$155,012	\$143,086	\$98,703	\$ 5.91	\$ 5.56	\$ 5.81	415	198	84	66	11	123	8	859	77,183	--	--	--		
ALABAMA	35,899	31,877	40,544	5.07	4.67	10.01	99	38	15	14	9	39	4	155	16,425	--	--	--		
MISSISSIPPI	33,139	44,440	36,015	3.12	4.22	4.05	87	46	17	5	2	27	3	253	16,464	--	--	--		
TENNESSEE	85,974	66,769	22,144	10.56	7.99	5.47	229	114	52	47	-	57	1	461	44,294	--	--	--		

x Formerly direct operations.

* Not included because majority of customers not connected.

** Unavailable pending survey.

DATA NOT FOR PUBLICATION

3993

COMPLAINANTS' EXHIBIT No. 919

Tennessee Valley Authority
Department of Operations

ACTUAL AND PROJECTED TVA SERVICE AREAS

Monthly Report No. 30
Issued Sept. 15, 1937

AUGUST - 1937

ACTUAL					PROJECTED			
Municipalities	No. of Custs.		Est. Miles Rural Line	Date of Initial TVA Service	Municipalities	Approx. Number Custs.	Est. Miles Rural Line	Tentative Date of Init. Service
	Total	Incr. fr. Prev. No.						
Muscle Shoals City, Ala.	136	4	-	Oct. 14, 1933	Holly Springs, Miss. (rural ext.)	270	60	As completed
Tupelo, Miss.	1,931	11	-	Feb. 7, 1934				
Athens, Ala.	1,681	13	119	June 1, 1934				
Amory, Miss.	900	18	4	Sept. 2, 1934				
New Albany, Miss.	1,545	11	70	Nov. 12, 1934				
Pulaski, Tenn.	1,035	11	28	Jan. 4, 1935				
Dayton, Tenn.	846	8	35	Feb. 1, 1935				
Okolona, Miss.	745	4	65	July 14, 1936				
Sheffield, Ala.	320	197	-	Mar. 16, 1936				
Dickson, Tenn.	838	16	-	May 12, 1936				
Holly Springs, Miss.	642	9	-	May 15, 1936				
Florence, Ala.	2,583	- 7	-	July 15, 1936				
Milan, Tenn.	684	- 9	-	July 18, 1936				
Jackson, Tenn.	*	0	-	July 18, 1936				
Bolivar, Tenn.	318	4	-	July 20, 1936				
Somerville, Tenn.	264	0	-	July 25, 1936				
Tuscumbia, Ala.	992	19	-	April 1, 1937				
Cooperatives					Cooperatives			
Alcorn Co., Miss.	2,418	16	69	June 1, 1934	Duck River Corp., Tenn.	720	196	As completed
Pontotoc Assn., Miss.	1,049	10	67	June 1, 1934	Pontotoc Assn., Miss.	30	4	As completed
Prentiss Co., Miss.	963	12	41	June 1, 1934	Southwest Tenn. Corp., Tenn.	147	59	As completed
Tishomingo Co., Miss.	761	33	3	June 1, 1934				
Tombigbee Assn., Miss.	2,392	6	235	June 1, 1934				
Monroe Co., Miss.	381	8	65	Feb. 15, 1936				
Pickwick Corp., Tenn.	736	6	97	Apr. 21, 1936				
Duck River Corp., Tenn.	546	7	192	May 27, 1936				
No. Georgia Corp., Ga.	1,565	24	406	July 14, 1936				
Weigs Corp., Tenn.	651	26	187	Aug. 6, 1936				
Cullman Corp., Ala.	995	10	162	Aug. 8, 1936				
Gibson Corp., Tenn.	1,020	13	242	Aug. 13, 1936				
Middle Tenn. Corp., Tenn.	691	5	248	Dec. 10, 1936				
Southwest Tenn. Corp., Tenn.	379	121	230	July 1, 1937				
Temporary Direct Operations					Temporary Direct Operations			
Lauderdale Co., Ala.	1,128	16	155	Oct. 20, 1934	Alabama Power District	477	97	As completed
Colbert Co., Ala.	514	-28	135	Dec. 4, 1934	Colbert Co., Ala.	5	1	As completed
Lincoln Corp., Tenn.	679	8	164	Oct. 1, 1935				
Alabama Power District	509	49	95	May 1, 1936				
TOTALS					TOTALS			
MUNICIPALITIES	15,460	309	321		MUNICIPALITIES	270	60	
COOPERATIVES	14,547	297	2,240		COOPERATIVES	897	259	
TEMPORARY DIRECT	2,830	45	550		TEMPORARY DIRECT	482	98	
GOVERNMENT RESERVATIONS	1,392	9	72					
TOTAL	34,229	660	3,183		TOTAL	1,649	417	

*Municipal use only.

DATA NOT FOR PUBLICATION

3994

COMPLAINANTS' EXHIBIT No. 919

3951

Tennessee Valley Authority
Department of Operations

AUGUST - 1937

Monthly Report No. 30
Issued Sept. 15, 1937COMMERCIAL STATISTICS

Municipalities	Months of TVA Service	Number of Com. Custs. Aug. - 1937	% Min. Bills	Average Total Bill Aug. - 1937	KWH PER CUSTOMER			Total Appliance Sales to Com. Custs.
					Aug. 1937	Aug. 1936	12 Mos. to Date	
Amory, Miss.	36	206	29	\$ 8.22	324	245	2,861	\$ 1,000
Athens, Ala.	39	418	29	5.06	197	258	2,709	--
Bolivar, Tenn.	13	94	39	5.95	206	171	2,056	--
Dayton, Tenn.	31	175	38	5.88	213	194	2,476	--
Dickson, Tenn.	16	152	23	7.75	310	303	3,643	--
Florence, Ala.	13	567	22	8.07	355	204	3,927	--
Holly Springs, Miss.	15	193	40	5.30	156	150	1,999	1,850
Milan, Tenn.	13	164	24	7.31	256	204	2,493	--
Muscle Shoals City, Ala.	47	23	22	6.04	196	142	1,852	--
New Albany, Miss.	33	338	29	5.93	217	214	2,422	1,955
Okolona, Miss.	25	166	30	7.44	274	271	2,807	249
Pulaski, Tenn.	32	257	37	7.28	293	257	3,276	500
Sheffield, Ala.	18	136	22	8.04	328	--	--	385
Somerville, Tenn.	13	89	38	7.16	181	175	2,187	--
Tupelo, Miss.	43	439	19	9.40	511	511	5,665	819
Tuscumbia, Ala.	5	162	28	7.66	271	--	--	86
<u>Cooperatives</u>								
Alcorn Co., Miss.	39	503	24	7.28	315	281	3,400	2,505
Cullman Corp., Ala.	13	104	48	3.02	65	11	573	--
Duck River Corp., Tenn.	14	46	46	3.03	69	92	874	100
Gibson Corp., Tenn.	12	133	46	3.55	87	--	860	--
Meigs Corp., Tenn.	13	84	48	4.47	141	48	958	--
Middle Tenn. Corp., Tenn.	9	70	47	3.53	101	--	--	--
Monroe Co., Miss.	18	78	35	5.29	188	130	1,450	--
No. Georgia Corp., Ga.	13	144	51	3.26	87	--	939	1,130
Pickwick Corp., Tenn.	16	132	35	5.11	149	192	1,598	--
Pontotoc Assn., Miss.	39	262	30	6.02	195	169	1,994	--
Prentiss Co., Miss.	39	240	29	7.24	245	212	2,485	--
Southwest Tenn. Corp., Tenn.	2	42	54	2.85	61	--	--	--
Tishomingo Co., Miss.	39	216	34	5.79	186	168	2,055	--
Tombigbee Assn., Miss.	39	410	39	4.19	109	96	1,245	3,139
<u>Direct Operations</u>								
Alabama Power District	16	72	40	5.66	192	129	1,722	--
Colbert Co., Ala.	30	78	45	3.78	100	174	1,113	--
Lauderdale Co., Ala.	34	189	36	4.60	118	114	1,313	58
Lincoln Corp., Tenn.	22	103	59	3.24	74	67	820	2,777
<u>TOTALS</u>								
MUNICIPALITIES	--	3,579	28	7.19	294	263	--	6,843
COOPERATIVES	--	2,464	36	5.34	180	187	--	6,874
DIRECT OPERATIONS	--	442	44	4.27	117	130	--	2,835
GOVERNMENT RESERVATIONS	--	133	33	11.03	669	912	--	--
TOTAL EXCL. GOV. RESERVATIONS	--	6,486	32	6.29	239	223	--	16,552
TOTAL TVA TERRITORY	--	6,619	32	6.38	247	235	--	--

DATA NOT FOR PUBLICATION

3995

COMPLAINANTS' EXHIBIT No. 919

Tennessee Valley Authority
Department of Operations

AUGUST - 1937

Monthly Report No. 30
Issued Sept. 15, 1937

RESIDENTIAL STATISTICS

Municipalities	NUMBER OF CUSTOMERS					Average Total Bill Aug. - 1937	KWH PER CUSTOMER						
	Total Res.	% Farm	% N-F	% Urban	% Min. Bills		August - 1937				Aug.-36	12 Mos. To Date	Median Aug.-37
Amory, Miss.	693	8	10	82	16	\$2.28	113	87	100	100	87	975	78
Athens, Ala.	1,261	22	12	66	24	2.81	87	171	165	149	166	1,676	66
Bolivar, Tenn.	223	--	100	--	41	2.48	--	88	--	88	45	749	40
Dayton, Tenn.	663	21	79	--	42	1.91	57	89	--	83	73	914	31
Dickson, Tenn.	684	1	--	99	27	2.29	166	--	111	111	85	1,194	58
Florence, Ala.	2,002	--	3	97	15	2.80	--	180	144	146	71*	1,578	83
Holly Springs, Miss.	449	8	92	--	31	2.87	55	111	--	107	68	1,331	51
Milan, Tenn.	519	10	3	87	48	2.18	55	158	72	72	41	720	28
Muscle Shoals City, Ala.	113	23	77	--	15	3.59	116	210	--	188	161	3,017	96
New Albany, Miss.	1,206	26	25	49	25	2.48	65	98	131	106	95	1,084	65
Okolona, Miss.	572	37	63	--	23	3.16	95	139	--	123	112	1,266	79
Pulaski, Tenn.	770	11	1	88	27	2.57	113	187	128	127	119	1,473	62
Sheffield, Ala.	182	--	--	100	25	2.29	--	--	124	124	--	--	70
Somerville, Tenn.	174	4	96	--	29	2.91	119	100	--	101	54	1,086	53
Tupelo, Miss.	1,484	5	10	85	17	2.72	194	135	137	140	142	1,849	86
Tusculum, Ala.	829	--	--	100	16	2.80	--	--	147	147	--	--	91
Cooperatives													
Alcorn Co., Miss.	1,907	14	20	66	21	3.44	76	94	185	151	145	1,699	77
Cullman Corp., Ala.	891	100	--	--	50	1.69	42	--	--	42	9x	393	27
Duck River Corp., Tenn.	500	100	--	--	36	2.37	76	--	--	76	66	791	44
Gibson Corp., Tenn.	886	74	26	--	28	2.90	112	92	--	107	--	994	61
Meigs Corp., Tenn.	566	92	8	--	48	1.83	51	94	--	55	33*	526	25
Middle Tenn. Corp., Tenn.	621	100	--	--	35	2.46	81	--	--	81	--	--	47
Monroe Co., Miss.	295	80	20	--	36	2.31	64	84	--	68	53	652	53
No. Georgia Corp., Ga.	1,421	91	9	--	48	1.84	52	86	--	55	47	537	28
Pickwick Corp., Tenn.	604	38	62	--	32	2.32	47	83	--	70	82	720	52
Pontotoc Assn., Miss.	765	27	73	--	31	2.77	71	115	--	104	97	1,051	58
Prentiss Co., Miss.	710	25	75	--	22	3.33	116	148	--	140	127	1,436	72
Southwest Tenn. Corp., Tenn.	336	78	22	--	38	2.34	82	56	--	77	--	--	32
Tishomingo Co., Miss.	542	23	77	--	30	3.03	98	134	--	126	104	1,402	66
Tombigbee Assn., Miss.	1,980	49	51	--	35	2.59	70	98	--	84	78	905	45
Direct Operations													
Alabama Power District	432	47	53	--	29	2.66	80	120	--	101	110	1,071	51
Colbert Co., Ala.	433	64	36	--	31	2.74	122	70	--	103	104	1,123	54
Lauderdale Co., Ala.	939	42	58	--	35	2.50	84	80	--	82	89	890	51
Lincoln Corp., Tenn.	575	96	4	--	40	2.18	65	31	--	64	53	684	39
TOTALS													
MUNICIPALITIES	11,824	11	21	68	24	2.62	88	116	133	124	97	--	68
COOPERATIVES	12,044	58	32	10	34	2.59	69	108	185	93	104	--	46
DIRECT OPERATIONS	2,379	60	40	--	34	2.50	83	86	--	86	85	--	48
GOVERNMENT RESERVATIONS	1,253	19	81	--	18	3.71	52	250	--	212	229	--	--
TOTAL EXCL. GOV. RES.	26,247	37	28	35	29	2.60	73	108	140	106	97	--	55
TOTAL TVA TERRITORY	27,600	36	30	34	29	2.65	73	125	140	111	105	--	--

* Only 17 days service.
 x Only 13 days service.
 † Only 20 days service.

DATA NOT FOR PUBLICATION

[fol. 3997] COMPLAINANTS' EXHIBIT No. 920

Farm Census Data for Alabama

As of Jan. 1, 1935

Value of Farms (Lands and Buildings)

County	Number of Farms	Land in Farms, Acres	Total	Average per Farm	Average per Acre
Colbert.....	2726	219,825	\$6,815,160	\$2,500	\$31.00
Franklin.....	3741	297,693	4,716,201	1,261	15.84
Lauderdale.....	5170	367,941	9,595,729	1,856	26.08
Lawrence.....	4855	305,705	8,003,756	1,649	26.18
Limestone.....	6266	338,151	12,449,028	1,987	36.81
Morgan.....	4912	332,425	8,839,360	1,800	26.59
Total.....	27670	1,861,740	\$50,419,234	\$1,820	\$27.00
Less ½ of Franklin County..	1870	148,847	2,358,101	1,261	15.84
Total ceded area..	25800	1,712,893	\$48,061,133	\$1,860	\$28.18
The State.....	273455	11,660,828	\$368,219,654	\$1,347	\$18.73

Note: The above figures taken from U. S. Census Report entitled "Alabama Statistics by Counties."

(Here follows 1 photolithograph, side folio 3998)

COMPLAINANTS' EXHIBIT NO. 921

General Electric
Rural Electrification Section
Schenectady, N. Y.

FARM SERVICE

Number and Percentage of Farms Receiving Electric Service
(Electric Light and Power Industry) (100% of Industry)

	AS OF JUNE 30, 1937			
	Farms Having Occupied Dwellings (A)	Farms Having Electric Service (C)	Increase First 6 Months 1937 (D)	Per Cent Electri- fication C/A
United States	6,502,280	1,138,335	119,342	17.5
Maine	40,852	18,594	468	45.5
New Hampshire	17,477	11,456	17	65.5
Vermont	26,179	8,762	466	33.5
Massachusetts	33,453	21,258	376	63.5
Rhode Island	4,125	3,738	-33	90.6
Connecticut	30,048	19,340	834	64.4
New York	170,766	83,567	8,085	48.9
New Jersey	29,329	17,858	1,394	60.9
Pennsylvania	188,688	80,035	7,884	42.4
Ohio	246,592	87,818	13,729	35.6
Indiana	195,637	48,345	5,424	24.7
Illinois	227,138	45,004	4,908	19.8
Michigan	191,185	74,273	11,259	38.8
Wisconsin	196,501	50,057	7,434	25.5
Minnesota	197,710	16,047	2,572	8.1
Iowa	215,714	37,622	2,845	17.4
Missouri	269,556	23,256	1,161	8.6
North Dakota	77,822	2,390	42	3.1
South Dakota	79,986	3,245	165	4.1
Nebraska	130,567	11,329	2,774	8.7
Kansas	164,128	17,364	854	10.6
Delaware	10,312	2,651	262	25.7
Maryland	43,318	14,444	813	33.3
District of Columbia	82	61	0	74.4
Virginia	187,875	21,262	2,060	11.3
West Virginia	101,006	9,720	2,451	9.6
North Carolina	282,253	29,546	6,539	10.5
South Carolina	156,092	13,921	2,235	8.9
Georgia	241,142	15,505	4,826	6.4
Florida	60,063	7,603	715	12.7
Kentucky	260,401	10,157	394	3.9
Tennessee	250,612	21,540	5,302	8.6
Alabama	260,323	17,994	3,795	6.9
Mississippi	297,441	6,369	554	2.1
Arkansas	245,296	5,965	387	2.4
Louisiana	165,558	7,243	462	4.4
Oklahoma	203,703	6,451	461	3.2
Texas	466,894	27,418	4,876	5.9
Montana	47,204	3,703	91	7.8
Idaho	43,037	20,555	1,679	47.8

	(A)	(C)	(D)	C/A
United States	6,502,280	1,138,335	119,342	17.5
Maine	40,852	18,594	468	45.5
New Hampshire	17,477	11,456	17	65.5
Vermont	26,179	8,762	466	33.5
Massachusetts	33,453	21,258	376	63.5
Rhode Island	4,125	3,738	-33	90.6
Connecticut	30,048	19,340	834	64.4
New York	170,766	83,567	8,085	48.9
New Jersey	29,329	17,858	1,394	60.9
Pennsylvania	188,688	80,035	7,884	42.4
Ohio	246,592	87,818	13,729	35.6
Indiana	195,637	48,345	5,424	24.7
Illinois	227,138	45,004	4,908	19.8
Michigan	191,185	74,273	11,259	38.8
Wisconsin	196,501	50,057	7,434	25.5
Minnesota	197,710	16,047	2,572	8.1
Iowa	215,714	37,622	2,845	17.4
Missouri	269,556	23,256	1,161	8.6
North Dakota	77,822	2,390	42	3.1
South Dakota	79,986	3,245	165	4.1
Nebraska	130,567	11,329	2,774	8.7
Kansas	164,128	17,364	854	10.6
Delaware	10,312	2,651	262	25.7
Maryland	43,318	14,444	813	33.3
District of Columbia	82	61	0	74.4
Virginia	187,875	21,262	2,060	11.3
West Virginia	101,006	9,720	2,451	9.6
North Carolina	282,253	29,546	6,539	10.5
South Carolina	156,092	13,921	2,235	8.9
Georgia	241,142	15,505	4,826	6.4
Florida	60,063	7,603	715	12.7
Kentucky	260,401	10,157	394	3.9
Tennessee	250,612	21,540	5,302	8.6
Alabama	260,323	17,994	3,795	6.9
Mississippi	297,441	6,369	554	2.1
Arkansas	245,296	5,965	387	2.4
Louisiana	165,558	7,243	462	4.4
Oklahoma	203,703	6,451	461	3.2
Texas	466,894	27,418	4,876	5.9
Montana	47,204	3,703	91	7.8
Idaho	43,037	20,555	1,679	47.8
Wyoming	16,963	1,547	14	9.1
Colorado	61,653	9,264	559	15.0
New Mexico	38,881	2,071	71	5.3
Arizona	18,344	6,475	66	35.3
Utah	27,362	14,365	826	52.5
Nevada	3,432	1,271	0	37.0
Washington	82,379	45,685	3,537	55.5
Oregon	62,332	26,916	1,063	43.2
California	134,859	107,275	2,646	79.5

Statistical Department
EDISON ELECTRIC INSTITUTE
August 23, 1937

3998

3953A

[fol. 3999] COMPLAINANTS' EXHIBIT No. 922 FOR IDENTIFICATION

(Omitted)

[fol. 4000] COMPLAINANTS' EXHIBIT No. 923

Water Control Bulletin Number 1

June 30th, 1936

Reservoirs of the Authority are to be operated: First, to serve as navigation channels and maintain navigation depths in the reaches of the river below the reservoirs; and Second, to reduce the magnitude of flood peaks below. Requirements for the control of malaria and the temporary needs of construction shall be given due consideration. So far as consistent with the above procedure, as much water power available at the dams shall be converted into electricity as is feasible.

Water Control Operations

The Board of Directors on June 30, 1936, adopted Bulletin Number 1 and approved Bulletin Number 2, as recommended by the Hydro-electric Committee, and established the following procedure with reference to the preparation of subsequent bulletins and the administration of the requirements of these bulletins:

1. A committee on Water Control Operations is created consisting of the Chief Water Control Planning Engineer and the Chief Electrical Engineer. This Committee shall prepare general regulations as to the control of water through the operation of reservoirs. In formulating these regulations the Committee shall confer with the Chief Construction Engineer, the Chief Medical Officer, the General Solicitor and the Superintendent of Power Operations or their representatives. The regulations shall be transmitted to the office of the General Manager in the form of bulletins for submission to the Board of Directors and for general distribution after approval by the Board.

2. The Superintendent of Power Operations shall be responsible for the day to day operation of the gates within the limits of and consistent with the requirements estab-

COMPLAINANTS' EXHIBIT No. 923

lished by the regulatory bulletins of the Committee. He shall fix the responsibility for load dispatching and gate operation at each dam. On dams under construction a representative of the construction organization shall be designated to operate the gates.

3. The Engineering Data Division shall maintain current records of rainfall, runoff and river flow, furnish daily reports and predictions, and designate a representative who will maintain daily contact with the Chief Load Dispatcher at Wilson Dam for the exchange of information.

[fol. 4001] Water Control Bulletin Number 2

June 30, 1936

Confirming direction of June 18, 1936, which was responsive to recommendations for increasing navigable depths in the lower river, until further notice water shall be released from Norris Reservoir so as to maintain as nearly as may be a constant flow at Florence, Alabama, of 15,000 c. f. s.

Variations in the daily peek discharges at Wilson Dam should not be so large that minimum flow at the Florence gage will ever be less than 13,000 c. f. s. The regulation of the water level in the Wilson pool should be accomplished by varying the discharge at the Wheeler Dam. The water level above the Wheeler Dam should be varied so as to iron out, as far as possible, any fluctuations in the amount of water flowing into the Wheeler Reservoir.

Water Control Bulletin Number 3

October 24, 1936

The Committee on Water Control Operations, having conferred with the several departments and divisions of the Authority interested in or concerned with the filling of Wheeler Reservoir, and with the District Engineer, U. S. A., Nashville, Tennessee District, has formulated and hereby announces the following regulations for the filling of Wheeler Reservoir.

Wheeler Reservoir will be filled so as to reach elevation 540 at the dam by, but not before, midnight, October 28, 1936. This elevation will not be exceeded without further

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notice from the Committee. As water becomes available during the next two months, after Wheeler Pool has filled to elevation 540 at the dam, the filling operation will be continued until normal pool level 555 has been reached. This filling operation between elevations 540 and 555, will be supervised by the Committee after due consideration of all factors involved in the best interest of the Authority.

Committee on Water Control Operations, Sherman M. Woodward, Chief Water Control Planning Engineer. Llewellyn Evans, Chief Electrical Engineer.

Approved by the Board of Directors, October 24, 1936.

[fol. 4002] Water Control Bulletin Number 4

March 10, 1937

The Committee on Water Control Operations has formulated the following general principles of control of Norris Reservoir for the spring runoff period of 1937 until April 1.

To provide the maximum amount of flood control, Norris Reservoir shall be drawn down to elevation 1010 by March 17, and then held approximately at that level until April 1. In case of heavy storms on the Tennessee water-shed, the outflow from the reservoir shall be controlled to limit the flow at Chattanooga to approximately 140,000 second feet, if possible. Storage accumulated above elevation 1010 by the withholding of flood flows shall be released as soon as possible at a rate not exceeding 30,000 second feet. Changes in rate of outflow shall be made in increments of not more than 5000 second feet every six hours.

Committee on Water Control Operations, Sherman M. Woodward, Chief Water Control Planning Engineer. Llewellyn Evans, Chief Electrical Engineer.

Approved by the Board of Directors, March 12, 1937.

Water Control Bulletin Number 5

April 1, 1937

The Committee on Water Control Operations has formulated the following general principles for the control of Norris Reservoir during April and May, 1937.

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To provide the maximum quantity of water in Norris Reservoir for release during the summer and fall for navigation requirements on the Tennessee River below Florence, Alabama, Norris Reservoir shall be gradually filled during April and May to reach elevation 1020 by June 1. In case of heavy storms in the Tennessee Basin, the outflow shall be controlled to limit the flow at Chattanooga to approximately 140,000 second feet, if possible. Normally changes in rate of outflow shall be made in increments not [fol. 4003] exceeding 2,500 second feet so that the total change will not exceed 5,000 second feet in twelve hours. In special cases, changes may be made in increments of not more than 5,000 second feet in six hours.

Committee on Water Control Operations, Sherman M. Woodward, Chief Water Control Planning Engineer. Llewellyn Evans, Chief Electrical Engineer.

Approved by the Board of Directors, March 31, 1937.

Water Control Bulletin Number 6

April 1, 1937

The Committee on Water Control Operations has formulated the following general principles for the control of Wheeler and Wilson Reservoirs to May 1, 1937.

For malaria control purposes, Wheeler Reservoir shall be gradually filled to elevation 556 by April 10 and held approximately at that level until May 1. Wilson Reservoir shall be held at approximately elevation 505.8 until May 1. In case of heavy storms in the Tennessee Basin, these reservoirs shall be controlled to limit the flood flow at Florence to approximately 200,000 second feet, if possible. During this period of operation a discharge of not less than 20,000 second feet shall be maintained at Florence for navigation.

Committee on Water Control Operations, Sherman M. Woodward, Chief Water Control Planning Engineer. Llewellyn Evans, Chief Electrical Engineer.

Approved by the Board of Directors, March 31, 1937.

COMPLAINANTS' EXHIBIT No. 923

[fol. 4004] Water Control Bulletin Number 7.

April 30, 1937

The Committee on Water Control Operations has formulated the following general principles for the control of Norris, Wheeler, and Wilson Reservoirs to October 1, 1937.

For Navigation purposes, water shall be released from Norris, Wheeler, and Wilson Reservoirs so as to maintain an average discharge of 17,000 second feet at Florence.

For malaria control purposes, Wheeler Reservoir shall be gradually drawn down, beginning May 1 *, from elevation 556 to elevation 553 by October 1 *. The rate of drawdown shall be about 0.3 ft. during May; about 0.8 ft. per month during June, July and August; and about 0.3 ft. during September. This schedule shall be subject to interruption when necessary, by regulation for floods, navigation, or construction operations; provided, upon completion of each such operation, the drawdown shall be resumed.

For malaria control purposes, Wilson Reservoir shall be drawn down about 0.6 ft. per month during June, July, and August, and 0.4 ft. during September, beginning at elevation 505.8.

Accompanying the drawdown, the reservoir shall be fluctuated weekly. The amount of the fluctuation shall be:

1. 1 ft. fluctuation for May, June, July, and August, provided the river flow is sufficient to refill the reservoir within the period.
2. During September the weekly fluctuation will gradually be reduced to reach 0.5 ft. by October 1.

For the protection of construction operations, in case of heavy storms, these reservoirs shall, if possible, be controlled as follows:

- (a) The flood flow at Pickwick shall be limited to approximately 100,000 second feet.

* The initial and final days of the malaria season shall be determined by the time when water temperatures are favorable for breeding mosquitoes, on written advice from Dr. Bishop.

COMPLAINANTS' EXHIBIT No. 923

(b) The water surface of Wheeler Reservoir at Guntersville Dam shall be kept under elevation 560.

Committee on Water Control Operations, Sherman M. Woodward, Chief Water Control Planning Engineer. Llewellyn Evans, Chief Electrical Engineer.

[fol. 4005] Approved by the Board of Directors, May 5, 1937.

Water Control Bulletin Number 8

May 21, 1937

The Committee on Water Control Operations has formulated the following general principles for the control of Norris Reservoir until about October 1, 1937.

As soon as Norris Reservoir has been filled to elevation 1020, the water will be allowed to spill over the dam, provided that sufficient releases will be made to prevent the reservoir level exceeding elevation 1021.

For malaria control purposes, after June 15 the reservoir level will be gradually drawn down at a rate of not less than 0.6 foot per month, provided that in case it should be necessary in storing flood water to raise the level, the gradual drawdown will then be resumed.

When releases are required for maintaining navigation below Florence, Norris Reservoir will be controlled as provided in Water Control Bulletin Number 7, dated April 30, 1937. At other times a small release (in the order of 200 second feet) will be maintained throughout the low flow season for purposes of sanitation in the Clinch River.

In case of heavy storms in the Tennessee Basin, Norris outflow will be controlled to limit the flow at Chattanooga to approximately 55,000 second feet until about June 15 and thereafter to limit the stage at Guntersville Dam to elevation 560, if possible.

Committee on Water Control Operations, Sherman M. Woodward, Chief Water Control Planning Engineer. Llewellyn Evans, Chief Electrical Engineer.

Approved by the Board of Directors June 3, 1937.

COMPLAINANTS' EXHIBIT No. 923**[fol. 4006] Water Control Bulletin Number 9****June 28, 1937**

The Committee on Water Control Operations has outlined the following special water control operation of Wheeler and Wilson Reservoirs.

In order to facilitate certain work at Wheeler Dam requiring lower stages in Wheeler and Wilson Reservoirs and to aid the construction forces in making closure of the third stage cofferdam at Pickwick Landing Dam, the following water control operation will be performed:

Beginning about July 1, Wheeler Reservoir shall be gradually drawn down so as to reach elevation 548 or 549 by July 17, Florence discharge during this period being regulated at not in excess of about 30,000 c. f. s. Wilson Reservoir shall also be drawn down to elevation 503 by July 17. The refilling of Wheeler and Wilson Reservoirs shall be done in such manner as to regulate the flow at Pickwick Landing Dam at not in excess of 8,000 c. f. s. beginning July 19 and continuing for an estimated period of from 7 to 10 days, or until the 3rd stage cofferdam closure has been completed.

Upon completion of this special operation, the operation of these reservoirs shall be resumed under Water Control Bulletin No. 7, dated April 30, 1937.

Committee on Water Control Operations, (S.) Sherman M. Woodward, Chief Water Control Planning Engineer. (S.) Llewellyn Evans, Chief Electrical Engineer.

Approved by the Board of Directors July 2, 1937.

[fol. 4007] COMPLAINANTS' EXHIBIT No. 924**Water Control Memorandum No. 1**

The Health and Safety Department wants to have the Wheeler Pool raised to Elevation 551 as soon as convenient. To obtain this result we think that a uniform release from Norris of 6,000 c. f. s. may well be maintained and that as

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soon as the Golden Eagle is out of the way the release at Wilson may be reduced slightly below 17,000 c. f. s., but not to less than about 16,200 c. f. s. As soon as the Wheeler Pool reaches the level of Elevation 551, the regular schedule of drawdown for malaria control should be resumed.

(Signed) Sherman M. Woodward.

Water Control Memorandum No. 2

The Health and Safety Department desires, for malaria control purposes, a somewhat rapid fluctuation of about 0.5 foot in Wheeler Reservoir as soon as practicable between the levels of about 551 and 551.5.

To conserve as much water as possible, this operation may be performed by reducing Norris release to about 4,000 c. f. s. on July 29; by saving water in Wheeler Reservoir during the drawdown fluctuation of Wilson Reservoir on August 3; and by drawing Wheeler Reservoir down by about 0.5 foot during the 3-day period, August 4, 5, and 6, after which the regular schedule of drawdown for Wheeler Reservoir may be resumed. About August 1, Norris release should be increased to about 6,000 c. f. s. in order to maintain the navigation release required at Florence.

(Signed) Sherman M. Woodward.

Water Control Memorandum No. 3

After an inspection of the Wheeler Reservoir area by the Health and Safety Department, it has been found desirable, for malaria control purposes, to draw Wheeler Reservoir down 1.0 foot to Elevation 550.3 as soon as practicable instead of 0.5 foot as stated in Water Control Memorandum No. 2, dated July 29, 1937.

To best serve the purpose, the drawdown should begin this date (August 3, 1937) and be completed as soon as practicable without adversely affecting Pickwick Landing Dam through excessive Wilson releases. This may be accomplished by extending the drawdown of one foot over a 3-day period, after which the regular schedule of drawdown stated in Water Control Bulletin No. 7 may be resumed.

(Signed) Robert A. Monroe for Sherman M. Woodward.

COMPLAINANTS' EXHIBIT No. 924

[fol. 4008] Water Control Memorandum No. 4

In view of the continued heavy rainfall over a considerable part of the basin, it appears advisable to make preparations for protecting Pickwick Dam in case a considerable flood should develop.

To avoid filling Wheeler Reservoir prematurely, and to provide additional storage space if possible, Wilson release should be increased to 30,000 c. f. s. as rapidly as the operation can be safely executed, and maintained at that release until a change becomes advisable.

(Signed) Sherman M. Woodward.

Water Control Memorandum No. 5

Indications are that Wheeler Reservoir inflows will decrease sufficiently within the next few days to warrant the reduction of Wilson Dam release to about 17,000 c. f. s.

The present 30,000 c. f. s. release at Wilson Dam, discussed in Water Control Memorandum No. 4, should be continued until Wheeler Reservoir is lowered to about elevation 549.6, after which the regular scheduled drawdown for malaria control stated in Water Control Bulletin No. 7 may be resumed, with such minor fluctuations as are desirable for operating purposes.

(Signed) Sherman M. Woodward.

Water Control Memorandum No. 6

Existing flows in the upper Tennessee River indicate that Wheeler inflows will require some regulation for the protection of Pickwick Landing construction.

Wilson releases should be regulated to pass about the flow of the river until Florence discharge reaches 25,000 c. f. s. This discharge should be continued until Wheeler Reservoir is again lowered to follow the scheduled drawdown from elevation 549.6 set forth in Water Control Bulletin No. 7, after which a minimum discharge of 17,000 c. f. s. may be maintained at Florence.

(Signed) Sherman M. Woodward.

[fol. 4009] Water Control Memorandum No. 7

The continuance of the wet season through much of the summer has resulted in abnormally low demands for water

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releases for navigation from Norris Reservoir and consequently in a higher reservoir level at present than would normally prevail. It seems apparent that all water now stored in Norris from the last flood season will not be required for maintaining navigation on the Tennessee River during the remainder of the low flow period. It is believed desirable to draw the reservoir down to about elevation 980 by December 15, 1937 so that adequate storage space will be available during the next flood season.

In order to accomplish this purpose, the release from Norris Reservoir should be gradually increased to about 7,000 c. f. s. and maintained at that rate except in case of flood when it may be found necessary temporarily to reduce or discontinue the release. At present, regulated flows at Chickamauga Dam should not exceed 45,000 c. f. s.

(Signed) Sherman M. Woodward.

Water Control Memorandum No. 8

The Health and Safety Department is agreeable to discontinuing during the remaining few days in September the drawdown of Wheeler Pool for malaria control purposes, and to raising that pool to not higher than elevation 550.2 at the dam.

Conforming with the above, all water in excess of that needed for navigation below Florence (17,000 c. f. s. Florence discharge) may be stored in Wheeler Reservoir, provided the pool elevation at the dam is not raised above 550.2 for the present.

It is no longer necessary to regulate flows at Pickwick Landing Dam to 30,000 c. f. s. or less as construction operations will now permit flows up to 100,000 c. f. s. or more, if necessary.

(Signed) Sherman M. Woodward.

Water Control Memorandum No. 9

The Design Department and the Department of Operations report that it is necessary during the present month to make certain inspections, repairs, and tests of the turbines at Norris Dam and that at certain times during the progress of this work it will be necessary that Norris re-[fol. 4010] lease be discontinued or held at a very low rate.

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In order that water may be available for maintaining a discharge at Florence of about 17,000 c. f. s. for navigation, it is essential that, in the absence of increased natural flows, water be released from Norris and stored in Wheeler Reservoir for this purpose.

To accomplish this purpose, the release from Norris Reservoir should be gradually increased, beginning at midnight Sunday, October 3, 1937, to about 15,000 c. f. s. and maintained at that rate until about 100,000 acre-feet have been stored in Wheeler Reservoir or until further notice. Meanwhile, if natural flows should increase sufficiently, Wheeler reservoir may be filled to, but not above, elevation 554. The exact date for reducing release for execution of the work at Norris will be determined later.

Temporary recorders have been installed at Clinton and Edgemoor for the purpose of obtaining data on wave travel. For this reason it is particularly desirable that the 15,000 c. f. s. release be held as steady as practicable during the first four days of the period.

(Signed) Sherman M. Woodward.

Water Control Memorandum No. 10

Confirming telephone conversation with the Chief System Operator, Wilson Dam, on October 3, 4, and 5, the release from Norris Reservoir will not be increased to about 15,000 c. f. s. as provided in Paragraph 3 of Water Control Memorandum No. 9, but instead will be reduced to about 4,000 c. f. s. and held steady at that rate until the weather becomes settled, or until further notice. This change was necessitated by the heavy rainfall over the **Basin during the past few days** subsequent to issuance of Water Control Memorandum No. 9.

The surplus water above 17,000 c. f. s. required for navigation at Florence may be temporarily stored in Wheeler Reservoir for subsequent release for navigation purposes when Norris release has been discontinued, provided that Wheeler Reservoir should not be filled above Elevation 554 until the present rebrushing operations in that reservoir have been completed.

The Director of Health has advised by memorandum that the fluctuation of Wilson Reservoir for malaria control

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purposes may be discontinued upon completion of the present operation, October 7, 1937. Accordingly, this reservoir may be raised to Elevation 505.8 after that date.

(Signed) Sherman M. Woodward.

[fol. 4011] Water Control Memorandum No. 11

Referring to Water Control Memorandum No. 10, rainfall in the basin having subsided and the weather appearing more settled, the release from Norris Reservoir may now be gradually increased to a maximum of 15,000 c. f. s. in order to lower Norris Reservoir to a suitable elevation for certain inspections, repairs, and tests of the turbines at the dam during the last half of October. It is essential for the above work that Norris Reservoir elevation be between 991 and 1006.

In drawing Norris Reservoir down as above, releases should not be made which will raise the stage on the Chickamauga tailwater gage above elevation 637, which represents a discharge of about 50,000 c. f. s. In the event of heavy rainfall above Chattanooga, sufficient to produce a stage above 637, the release at Norris should be reduced promptly or discontinued if necessary to regulate the river at Chickamauga as above.

(Signed) Sherman M. Woodward.

Recommended (Signed) Nicholls W. Bowden.

Water Control Memorandum No. 12

The Sanitation Section of the Health and Safety Department is continuing rebrushing operations in the Wheeler Reservoir until about October 15 and desires that the reservoir not be allowed to fill above elevation 553 before that date.

Norris Reservoir release should be gradually reduced to about 1500 c. f. s. by 6 A. M. October 11 to provide a tailwater elevation suitable for certain turbine inspections and repairs by the Operating Department. During the period that this work is in progress, it is desirable that releases be maintained at as large a volume as the work permits.

Tests on Norris turbines are planned to begin on October 18, and it is desired that the reservoir be between elevations 991 and 1006 for this purpose. During the period that tests

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are in progress, such releases should be made as are consistent with and necessary for the turbine tests, provided that the changes and volumes of releases are not detrimental to other interests.

(Signed) Sherman M. Woodward.

Recommended (Signed) Nicholls W. Bowden.

[fol. 4012] Water Control Memorandum No. 13

Tests on Norris turbines are planned to begin on October 19 and releases will probably be too small to provide 17,000 c. f. s. inflow into Wheeler. During this period the 17,000 c. f. s. discharge at Florence for navigation purposes should be maintained by releases from Wheeler and Wilson reservoirs when it is necessary to supplement the inflow.

As it is desired to lower Norris reservoir to about elevation 980 by December 15, 1937, to provide storage space for flood control and also to hold reservoir stages between elevations 991 and 1006 (preferably at about 1,000) for turbine tests, Norris releases should be maintained at as large a volume as the turbine tests permit, limiting releases to a maximum of about 10,000 c. f. s. in order to avoid excessive damage to crops on the Clinch River below the dam. At the same time, Chickamauga Dam lower gage should be held at not higher than elevation 637.

Norris turbine tests should be expedited as much as possible as higher Tennessee River flows may be expected at any time and special river regulation will shortly be necessary for construction, both of which will interfere with lowering Norris reservoir.

(Signed) Sherman M. Woodward.

Recommended (Signed) Nicholls W. Bowden.

Water Control Memorandum No. 14

The Construction Department desires that, if practicable, flows at Pickwick Landing Dam be regulated so as not to exceed 25,000 c. f. s. during the period November 3 to November 23, 1937. This is essential in order that spillway openings in the dam may be closed. It also desires that, beginning about November 15, Wheeler Pool be filled to

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elevation 555 or 556 to aid the third stage cofferdam closure at Guntersville Dam about December 1st.

In order to accomplish the above, Wheeler Reservoir should be gradually drawn down to elevation 550 by November 1 to provide storage space for regulating the flow at Pickwick Landing Dam. This will also facilitate certain construction work at Decatur. It is estimated that, under present flow conditions, a steady flow of about 33,000 c. f. s. at Florence will lower the reservoir to elevation 550 by the date desired. Changed flow conditions will require changes in Florence discharge.

About November 15, or as soon as the water control operation for Pickwick Landing Dam will permit, Wheeler Reservoir should be raised as fast as inflows will permit to about elevation 555 or 556 and then held steady during the closure of cofferdam at Guntersville.

(Signed) Sherman M. Woodward.

Recommended (Signed) Nicholls W. Bowden.

[fol. 4013] Water Control Memorandum No. 15

Since the issuance of Water Control Memorandum No. 14, rainfall in the Tennessee Basin above Wheeler Reservoir has increased stream flow considerably. As a result of this, it appears desirable to provide additional storage space in Wheeler Reservoir for use in regulating flows at Pickwick Landing Dam during the closing of spillway openings in the dam between November 3 and November 23, 1937.

To accomplish this purpose, Wheeler Reservoir should be gradually drawn down to about elevation 549, one foot lower than previously proposed, by November 1st. It is estimated that under present flow conditions, a steady flow of about 55,000 c. f. s. at Florence will lower the reservoir as above. Changes in flow conditions will require corresponding changes in Florence discharge.

(Signed) Sherman M. Woodward.

Recommended (Signed) Nicholls W. Bowden.

Water Control Memorandum No. 16

The correct date of Water Control Memorandum No. 15 is October 27, 1937, and not October 19, 1937, as shown on the copies distributed.

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It is desirable to draw Norris Reservoir down to about elevation 960 by January 1, 1938, to provide storage space for flood control during the winter and spring flood season.

To accomplish this, the release from the reservoir should be increased to about 15,000 c. f. s. and maintained at that rate except in case of flood, or other need for stream flow regulation downstream, when it may be essential temporarily to reduce or discontinue the release. Regulated flows at Chickamauga Dam should not exceed 637 on the down stream gage until the completion of work in the second stage cofferdam in the near future.

(Signed) Sherman M. Woodward.

Recommended (Signed) Nicholls W. Bowden.

[fol. 4014] Water Control Memorandum No. 17

With the completion of spillway closures, Pickwick Landing Dam is in condition for stages to the top of the cofferdam at elevation 390. Flows at Pickwick Landing Dam should be regulated so as not to exceed 230,000 c. f. s.

The Construction Department desires that Wheeler Reservoir be raised to about elevation 555 or 556 and held steady during the closure of the third stage cofferdam at Guntersville Dam which should be completed about December 1. Wheeler Reservoir should be raised to about elevation 555 as fast as inflow in excess of 17,000 c. f. s. permits and held steady unless stream flows develop which require regulation for the protection of Pickwick Landing Dam. In case heavy rainfall occurs, Wheeler Reservoir should be lowered in advance of the peak flow to provide storage space for regulating the flow at Pickwick Landing Dam.

(Signed) Robert A. Monroe, for Sherman M. Woodward.

Recommended (Signed) Nicholls W. Bowden.

Water Control Memorandum No. 18

As construction of the third stage cofferdam at Guntersville Dam is in progress, Wheeler Reservoir should be raised to about elevation 556 as fast as inflow permits and held

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steady at that elevation unless stream flows develop which require regulation for the protection of Pickwick Landing Dam. In case that heavy rainfall occurs, Wheeler Reservoir should be lowered in advance of the flood peak to provide storage space for regulating the flow at Pickwick Landing Dam so as not to exceed 160,000 c. f. s.

Flow at Florence should be maintained at 19,000 c. f. s. between 7 a. m. and 4 p. m. on Wednesday, Friday, and Saturday of this week as an aid to dredging by the U. S. Engineers. At other hours the flow may be reduced to 17,000 c. f. s. Should inflows fall below 17,000 c. f. s., the deficiency should be supplied from Wilson Reservoir, holding Wheeler Reservoir steady at elevation 556.

In order to reduce stream flow as an aid to Guntersville Dam cofferdam closure, Norris release should be reduced, beginning about noon November 25, to about 2,000 c. f. s. Unless stream flow conditions require a change, it is contemplated that the 2,000 c. f. s. release will be held until about December 4, except as required for power production and plant testing. This reduction in release will also provide farmers on Clinch River bottomland and islands an opportunity to harvest crops.

(Signed) Robert A. Monroe, for Sherman M. Woodward.

Recommended (Signed) J. H. Wilkinson.

[fol. 4015] Water Control Memorandum No. 19

In order to provide water in excess of the present flow of the Tennessee River to raise Hales Bar Pool as an aid to navigation Norris release should be increased to 4,000 c. f. s. beginning about 5 p. m. Thursday, December 2, and continued at about that rate until enough water is released to fill the pool, after which the release should be reduced to about 2,000 c. f. s. except as required for power production and plant testing.

It is contemplated that Hales Bar Dam will continue to pass the present flow of the river and store the 2,000 c. f. s. increase in Norris release as arranged by Mr. C. L. Karr. The flow at Guntersville Dam should not exceed the present flow of the river during cofferdam closure.

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Wheeler Reservoir should be held at about elevation 556 except in case of heavy rainfall. Should heavy rainfall occur, the reservoir should be lowered in advance of the flood peaks to provide storage space for regulating the flow at Pickwick Landing Dam so as not to exceed 160,000 c. f. s.

Flow at Florence should be maintained at a minimum of 17,000 c. f. s., supplying any deficiency in inflow from Wilson Reservoir.

(Signed) Robert A. Monroe, for Sherman M. Woodward.

Recommended (Signed) Nicholls W. Bowden.

Water Control Memorandum No. 20

Referring to last paragraph of Water Control Memorandum No. 18, the Guntersville Dam cofferdam has now been closed and the drawdown of Norris Reservoir to elevation 960 to provide storage space for flood control should be resumed. Also, Wheeler Reservoir should be drawn down to elevation 550, in order to provide first, storage space for regulating flows for Pickwick Landing Dam construction operations, second, a suitable stage at Wheeler Lock to permit the U. S. Engineers to construct a concrete retaining wall, and third, additional depths below Wilson Dam to aid the U. S. Engineers in removing stone dikes before the Pickwick Pool is raised.

To accomplish the above, Norris release should be gradually increased, beginning today, to 15,000 c. f. s. and maintained at that rate until the reservoir is lowered to elevation 960, except in case of floods. Regulated flows at Chickamauga Dam should not exceed a maximum elevation of 640 on the tailwater gage (about 69,000 c. f. s.) and it is desirable that, if practicable, the flows at that point should be held below elevation 637 on the tailwater gage (about 50,000 c. f. s.).

[fol. 4016] Water Control Memorandum No. 20

Wheeler Reservoir should be lowered, beginning Monday, December 13, 1937, by gradually increasing the release to about 50,000 c. f. s. and maintaining that rate until the reservoir reaches elevation 550, after which the reservoir should

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be held at elevation 550, passing the flow of the river, except in case of floods. In case of floods, Pickwick Landing Dam flows should be regulated so as not to exceed headwater elevation 390 (about 160,000 c. f. s.) until December 15. After December 15 flows at Pickwick Landing Dam should be regulated so as not to exceed tailwater elevation 372 (about 115,000 c. f. s.).

(Signed) Sherman M. Woodward.

Recommended (Signed) Nicholls W. Bowden.

Water Control Memorandum No. 21

In view of the present unsettled weather conditions and the possibility of rain throughout the basin, it is desirable that the flood storage space above elevation 550 in Wheeler Reservoir be made available for the protection of Pickwick Landing Dam as soon as practicable.

To accomplish this the release at Wheeler Dam should be gradually increased to about 65,000 c. f. s. and maintained at about that rate until the reservoir reaches elevation 550, after which the reservoir should be held steady passing the flow of the river, except in case of floods. In case of floods, Pickwick Landing Dam flows should be regulated so as not to exceed tailwater elevation 372, at which the discharge is about 115,000 c. f. s.

(Signed) Robert A. Monroe, for Sherman M. Woodward.

Recommended (Signed) Nicholls W. Bowden.

[fol. 4017] Water Control Memorandum No. 22

In view of the present continued unsettled weather conditions, it is desirable that the flood storage space above elevation 547 in Wheeler Reservoir and above elevation 503 in Wilson Reservoir be made available for the protection of Pickwick Landing Dam as soon as practicable.

To accomplish the above, the release at Wheeler Dam should be gradually increased to about 66,000 c. f. s. and the release at Wilson Dam should be gradually increased to about 70,000 c. f. s. and maintained at about these rates until Wheeler Reservoir is lowered to elevation 547 and Wilson Reservoir is lowered to about elevation 503. After being

COMPLAINANTS' EXHIBIT No. 924

lowered to these elevations, both reservoirs should be held steady, passing the flow of the river, except in case of floods. In case of floods, Pickwick Landing Dam flows should be regulated so as not to exceed tail-water elevation 372, at which stage the discharge is about 115,000 c. f. s.

Beginning about 6 P. M. today Norris release should be gradually reduced to about 5000 c. f. s. After this reduction is accomplished, the release should be maintained at about 5000 c. f. s.

(Signed) Sherman M. Woodward.

Recommended (Signed) J. H. Wilkinson, for Nicholls W. Bowden.

Water Control Memorandum No. 23

The unsettled weather conditions indicate that rain may continue for several days. In order to lower Wheeler and Wilson Reservoirs, the discharge at Wheeler should be gradually increased to 75,000 c. f. s. and at Wilson to 80,000 c. f. s.

(Signed) Sherman M. Woodward.

Recommended (Signed) J. H. Wilkinson, for Nicholls W. Bowden.

[fol. 4018] Water Control Memorandum No. 24

The present releases at Wilson and Wheeler Dams should be continued until Wilson Reservoir is lowered to elevation 503 and Wheeler Reservoir is lowered to elevation 550. Both reservoirs should then be held steady except in case of floods requiring regulation.

(Signed) Sherman M. Woodward.

Recommended (Signed) J. H. Wilkinson.

[fol. 4019] COMPLAINANTS' EXHIBIT No. 925

Map Entitled "Tennessee River Plan and Profile, Existing and Proposed High Dams"

(Original Exhibit)

(Here follow two photolithographs, side folios 4020 and 4021)

TENNESSEE VALLEY AUTHORITY
TABULATION OF
PRINCIPAL FEATURES OF PRESENT AND PROPOSED
DAM AND RESERVOIR PROJECTS
September 29, 1937

<u>Projects</u>	<u>Miles from Mouth of River</u>	<u>Length of Dam (Feet)</u>	<u>Maximum Lock Lift (Feet)</u>	<u>Length of Reservoir (Miles)</u>	<u>Normal Area of Reservoir (Acres)</u>	<u>Total Volume of Reservoir (Acre-feet)</u>
<u>Main River Projects, Existing or Under Construction</u>						
Gilbertsville	22.5	8,600	68	184.2	160,000	4,850,000
Pickwick	206.7	7,715	61	52.7	41,600	1,032,000
Wilson	259.4	4,860	90	15.5	16,100	611,000
Wheeler	274.9	6,502	53	74.1	64,300	1,100,000
Guntersville	349.0	3,950	15	82.1	63,300	951,000
Hales Bar	431.1	2,500	40	39.9	6,500	100,000
Chickamauga	471.0	5,679	53	58.9	32,000	639,000
Total						<u>9,283,000</u>
<u>Main River Projects, Proposed and Under Investigation</u>						
Watts Bar	529.9	2,900	71	72.4	42,600	1,188,000
Coulter Shoals	602.3	2,070	71	53.5	11,900	334,000
Total						<u>1,522,000</u>
<u><i>Existing or</i></u> <u>Tributary Projects, Under Construction</u>						
Norris	79.8(3)	1,860	None	72.0	34,200	2,567,000
Hiwassee	75.8(3)	1,250	None	22.0	6,200	439,000
Total						<u>3,006,000</u>
<u>Tributary Projects, Proposed, Not Under Investigation</u>						
Pontana	60.8(3)	1,700	None	30.0	9,200	1,500,000
Grand Total						<u>15,311,000</u>

In the initial stage, power installation is included at Pickwick, Wilson, Wheeler, Guntersville, Chickamauga, Nor

TABULATION OF
PRINCIPAL FEATURES OF PRESENT AND PROPOSED
DAM AND RESERVOIR PROJECTS
September 29, 1937

<u>Projects</u>	<u>Miles from Mouth of River</u>	<u>Length of Dam (Feet)</u>	<u>Maximum Lock Lift (Feet)</u>	<u>Length of Reservoir (Miles)</u>	<u>Normal Area of Reservoir (Acres)</u>	<u>Total Volume of Reservoir (Acre-feet)</u>
<u>Main River Projects, Existing or Under Construction</u>						
Gilbertsville	22.5	8,600	68	184.2	160,000	4,850,000
Pickwick	206.7	7,715	61	52.7	41,600	1,032,000
Wilson	259.4	4,860	90	15.5	16,100	611,000
Wheeler	274.9	6,502	53	74.1	64,300	1,100,000
Guntersville	349.0	3,950	45	82.1	63,300	951,000
Kales Bar	431.1	2,500	40	39.9	6,500	100,000
Chickamauga	471.0	5,679	53	58.9	32,000	639,000
Total						<u>9,283,000</u>
<u>Main River Projects, Proposed and Under Investigation</u>						
Watts Bar	529.2	2,900	71	72.4	42,600	1,188,000
Coulter Shoals	602.3	2,070	71	53.5	11,900	334,000
Total						<u>1,522,000</u>
<u>Evaluating or</u>						
<u>Tributary Projects, Under Construction</u>						
Norris	79.8(3)	1,860	None	72.0	34,200	2,567,000
Kiwassee	75.8(3)	1,250	None	22.0	6,200	439,000
Total						<u>3,006,000</u>
<u>Tributary Projects, Proposed, Not Under Investigation</u>						
Fontana	60.8(3)	1,700	None	30.0	9,200	1,500,000
Grand Total						<u>15,311,000</u>

- In the initial stage, power installation is included at Pickwick, Wilson, Wheeler, Guntersville, Chickamauga, 1
- (1) Includes cost of lock (\$1,939,693), built by Corps of Engineers, U. S. Army.
 - (2) Includes highways, Town of Norris, forest lands, etc.
 - (3) Kiwassee Dam is on the Kiwassee River, which enters the Tennessee River at Mile 500.5; Norris Dam is on the Tennessee River, which enters the Tennessee River at Mile 567.7; and the proposed Fontana Dam is on the Little Tennessee River, which enters the Tennessee River at Mile 601.3.
 - (4) Appraised valuation as of July 1, 1933. (Original cost was \$46,950,718 including \$359,593, maintenance dam.)
 - (5) Includes \$500,000 for raising Wilson Dam and Lock Dam No. 1, and installation of additional generating units. Estimates for River Channel Improvement are included in the cost estimates as follows: Pickwick, \$1,500,000; Wheeler, \$130,000; Guntersville, \$1,156,000; Chickamauga, \$3,870,000; Watts Bar, \$510,000.

X
XXXX
XXXX

COMPLAINANTS' EXHIBIT NO. 926 (EXCLUDED)

PROPOSED

<u>Total Volume of Reservoir (Acre-feet)</u>	<u>Controlled Storage (Acre-feet)</u>	<u>Initial Power Installation (Kilowatts)</u>	<u>Ultimate Power Installation Provided for (Kilowatts)</u>	<u>Estimated Cost Initial Stage</u>	<u>Estimated Cost Ultimate Stage</u>
4,850,000	3,700,000	None	192,000	\$ 95,000,000	\$112,000,000
1,032,000	416,000	72,000	216,000	33,219,279	42,151,279
611,000	43,000	184,000	144,000	31,300,000(1)	42,300,000(5)
1,100,000	350,000	128,000	256,000	36,849,403(1)	44,149,403(1)
951,000	242,000	72,000	96,000	36,334,720	38,141,720
100,000	-	-	-	-	-
639,000	325,000	81,000	108,000	43,127,903	45,500,903
<u>9,283,000</u>	<u>5,076,000</u>	<u>537,000</u>	<u>1,312,000</u>	<u>\$275,831,305</u>	<u>\$325,116,305</u>
1,188,000	216,000	None	150,000	\$ 29,200,000	\$ 39,800,000
334,000	107,000	None	60,000	25,000,000	30,000,000
<u>1,522,000</u>	<u>353,000</u>	<u>None</u>	<u>210,000</u>	<u>\$ 54,200,000</u>	<u>\$ 69,800,000</u>
2,567,000	2,020,000	100,000	100,000	\$ 36,361,738(2)	\$ 36,361,738(2)
439,000	365,000	60,000	120,000	21,529,579	23,029,579
<u>3,006,000</u>	<u>2,385,000</u>	<u>160,000</u>	<u>220,000</u>	<u>\$ 57,891,317</u>	<u>\$ 59,391,317</u>
1,500,000	920,000	None	180,000	\$ 40,000,000	\$ 51,000,000
<u>15,311,000</u>	<u>8,734,000</u>	<u>697,000</u>	<u>1,922,000</u>	<u>\$127,922,622</u>	<u>\$155,307,622</u>

Chickamauga, Norris, and Hiwassee.

PROPOSED

<u>Total Volume of Reservoir (Acre-feet)</u>	<u>Controlled Storage (Acre-feet)</u>	<u>Initial Power Installation (Kilowatts)</u>	<u>Ultimate Power Installation Provided for (Kilowatts)</u>	<u>Estimated Cost Initial Stage</u>	<u>Estimated Cost Ultimate Stage</u>
4,850,000	3,700,000	None	192,000	\$ 95,000,000	\$112,000,000
1,032,000	416,000	72,000	216,000	33,219,279	42,451,279
611,000	43,000	184,000	144,000	31,300,000(1)	42,300,000(5)
1,100,000	350,000	128,000	256,000	36,819,403(1)	44,419,403(1)
951,000	242,000	72,000	96,000	36,334,780	38,414,780
100,000	-	-	-	-	-
639,000	325,000	81,000	108,000	43,127,903	45,500,903
<u>9,283,000</u>	<u>5,076,000</u>	<u>537,000</u>	<u>1,312,000</u>	<u>\$275,831,305</u>	<u>\$325,116,305</u>
1,188,000	246,000	None	150,000	\$ 29,200,000	\$ 39,800,000
334,000	107,000	None	60,000	25,000,000	30,000,000
<u>1,522,000</u>	<u>353,000</u>	<u>None</u>	<u>210,000</u>	<u>\$ 54,200,000</u>	<u>\$ 69,800,000</u>
2,567,000	2,020,000	100,000	100,000	\$ 36,361,738(2)	\$ 36,361,738(2)
439,000	365,000	60,000	120,000	21,589,579	25,089,579
<u>3,006,000</u>	<u>2,385,000</u>	<u>160,000</u>	<u>220,000</u>	<u>\$ 57,951,317</u>	<u>\$ 59,991,317</u>
1,500,000	920,000	None	180,000	\$ 40,000,000	\$ 51,000,000
<u>15,311,000</u>	<u>8,734,000</u>	<u>697,000</u>	<u>1,922,000</u>	<u>\$427,922,622</u>	<u>\$505,307,622</u>

Chickamauga, Norris, and Hiwassee.

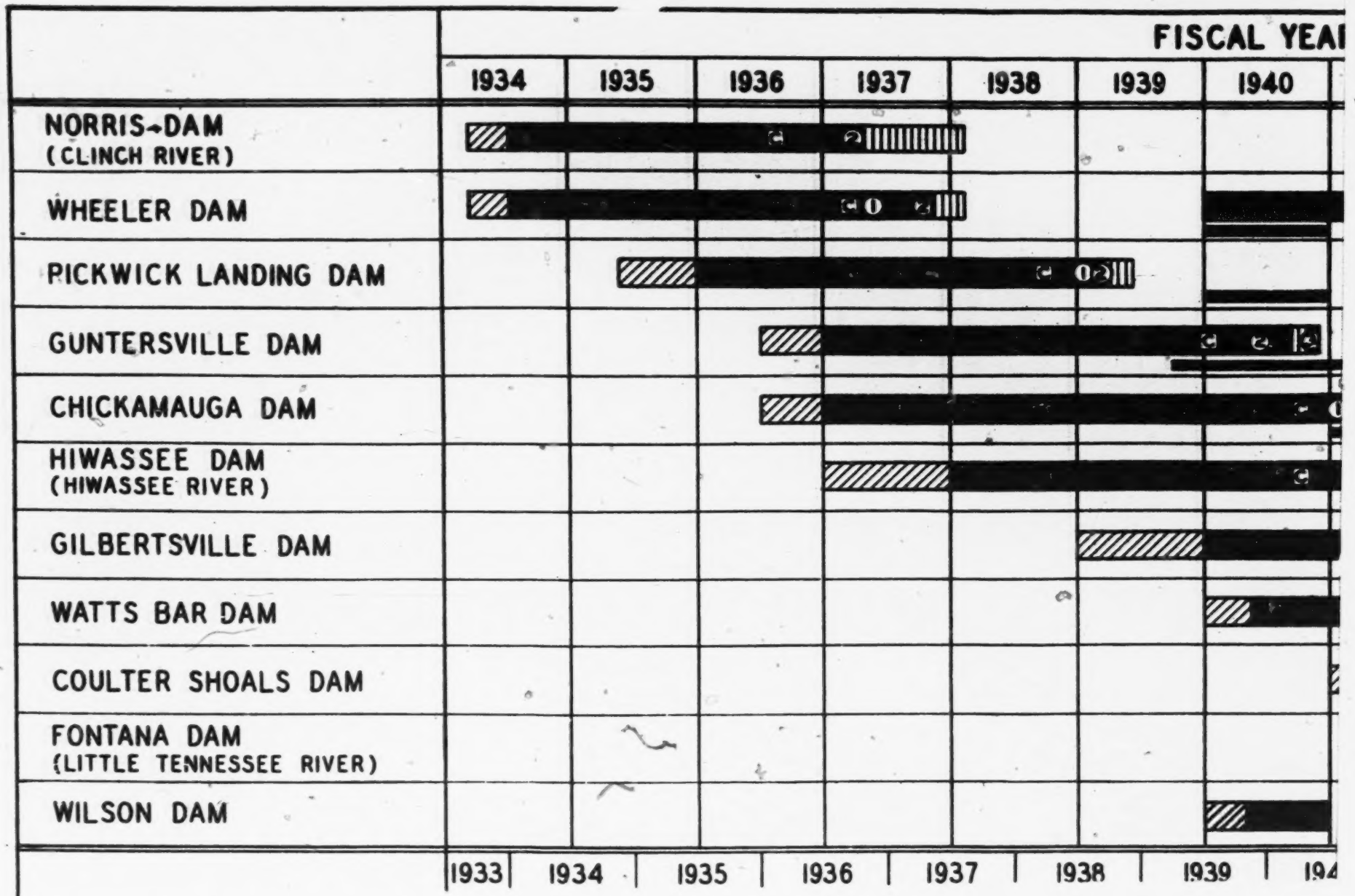
s Dam is on the Clinch
s Little Tennessee

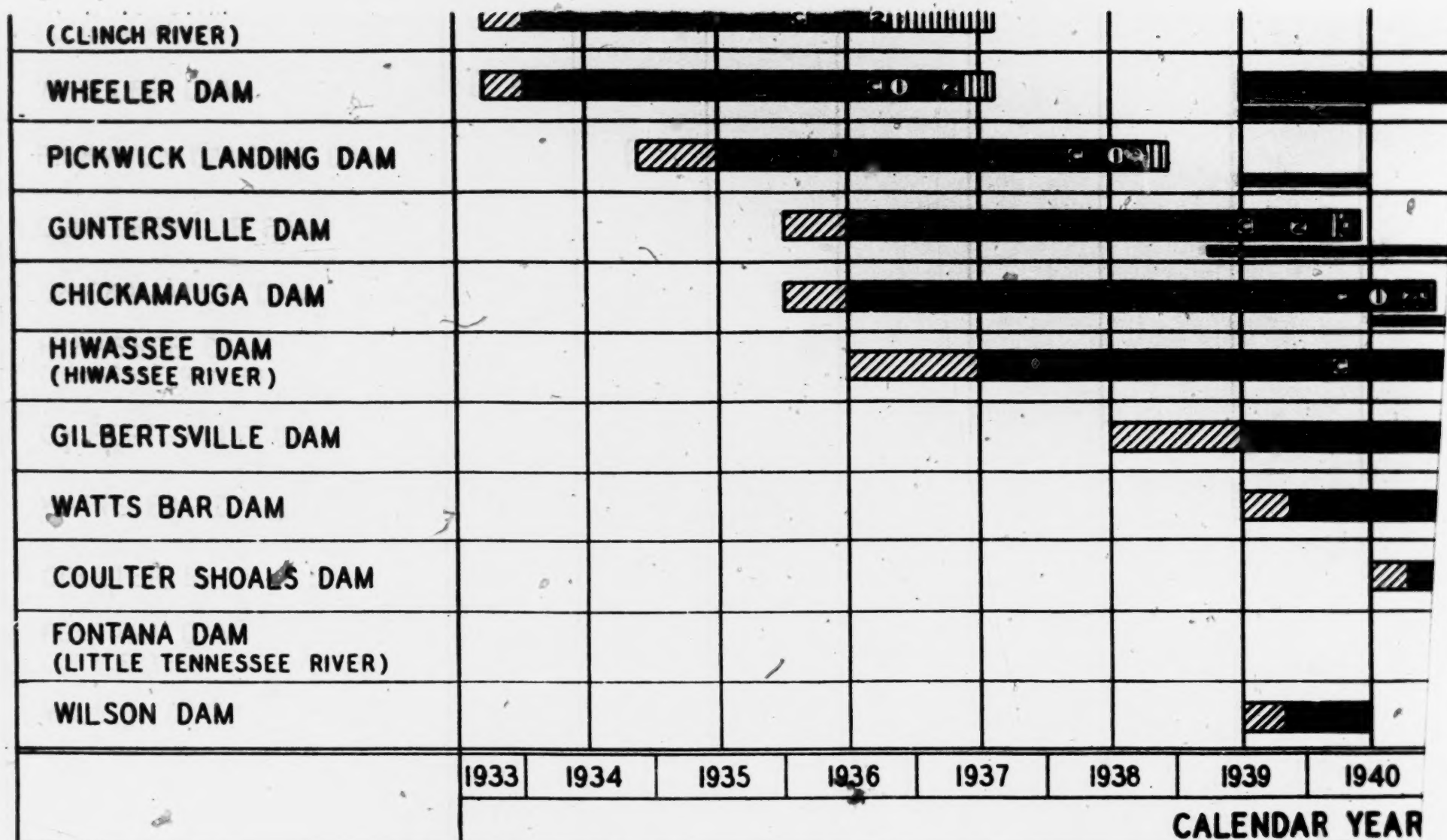
maintenance during cessation of work in construction period)
generating units.

Watts Bar, \$562,000; Coulter Shoals, \$960,000.

COMPLAINANTS' EXHIBIT No 927

TENNESSEE VALLEY AUTHORITY
PROPOSED PROGRAM OF DAM CONSTRUCTION





LEGEND

	Closure Date
	Indicates number of Power Units in Operation
	Preliminary Construction Work
	Construction Period
	Completion of Incidental Work
	River Channel Improvement

The following power installations

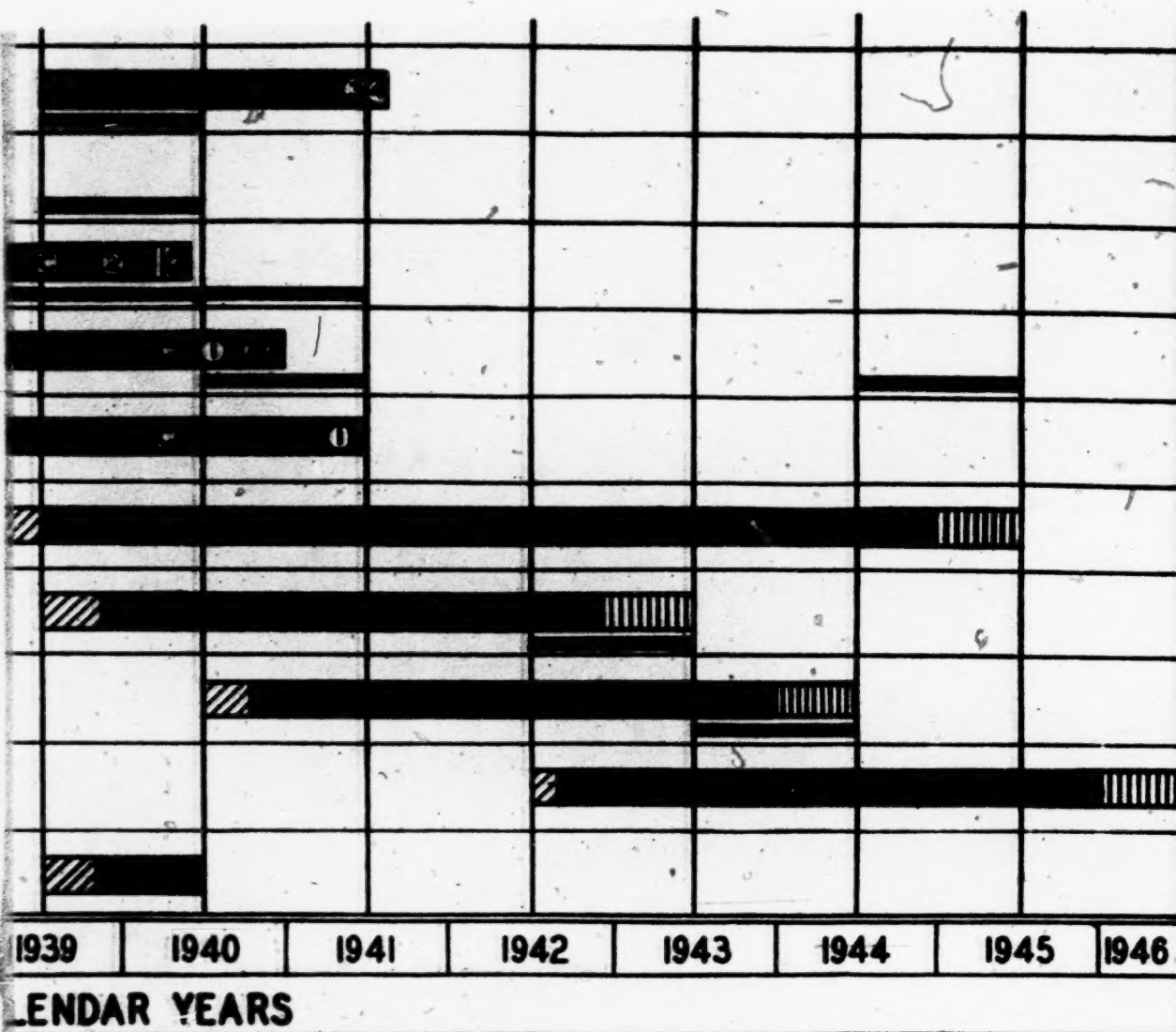
	Units	Total kw.
Wilson	- 8 -	184,000
Norris	- 2 -	100,000
Wheeler	- 4 -	128,000
Pickwick	- 2 -	72,000
Guntersville	- 3 -	72,000
Chickamauga	- 3 -	81,000
Hiwassee	- 1 -	60,000

PRIORITY

IN CONSTRUCTION

SCAL YEARS

[illegible]



over installations are included in the above program —

Units	Total kw.	
8	- 184,000	(Installed prior to creation of T.V.A.)
2	- 100,000	
4	- 128,000	
2	- 72,000	
3	- 72,000	
3	- 81,000	
1	- 60,000	

[fol. 4022] COMPLAINANTS' EXHIBIT 928

**Power Contract Between Tennessee Valley Authority and
City of Florence, Alabama**

This Agreement, made and entered into this 12th day of March, 1934, pursuant to the Tennessee Valley Authority Act of 1933, between the Tennessee Valley Authority, hereinafter called "Authority", a corporation created by and acting under said Act, and the City of Florence, a municipal corporation duly organized, created and existing under and by virtue of the laws of the State of Alabama, hereinafter called "Contractor",

Whereas Authority, by Section 10 of said Act, is authorized to sell the surplus power generated by it and not used in its operation, and is directed to give preference to States, Counties, Municipalities and cooperative organizations of citizens or farmers not organized or doing business for profit; and

Whereas, by Section 11 of said Act it is provided that the sale of power by Authority shall be primarily for the benefit of the people of the section as a whole and particularly the domestic and rural consumers to whom the power can economically be made available; and

Whereas, the electors of the Contractor have by referendum authorized Contractor to acquire by construction or purchase a municipal electric distribution system, and Contractor intends, with all possible diligence and expedition, to acquire by construction or purchase and to operate such a system; and

Whereas, Contractor desires to purchase power from Authority for municipal purposes and for resale and proposes to make the necessary appropriations in payment therefor; and

[fol. 4023] Whereas, Contractor has by ordinance of its council duly authorized the making of this contract, and Authority, by its by-laws and resolutions, has likewise so authorized;

Now Therefore, for and in consideration of the mutual covenants herein contained, the parties hereto mutually covenant and agree as follows:

1. Term of Contract.—This contract shall become effective upon the execution hereof, and shall continue in effect for thirty years; Provided, however, that all obligations of

COMPLAINANTS' EXHIBIT 928

the parties hereto with regard to the rendition of service and payment therefor shall begin at such time (hereinafter designated "date of initial delivery") as Contractor shall have acquired its distribution system, or any part thereof, and shall be in physical position to take such service for its said system or part thereof. All service and payment periods hereinafter referred to shall be computed (as) from the date of initial delivery.

2. Acquisition of Plant.—Contractor agrees to use all reasonable diligence in acquiring by construction or purchase a municipal distribution system for the City of Florence with the utmost expedition, and to do all acts and things which it may legally do, which may be necessary or helpful in effectuating such acquisition. Authority agrees, upon request of Contractor, to render to Contractor without compensation such accounting, legal and engineering assistance looking to the acquisition of said system as Authority may deem helpful or advisable.

3. Power Supply.—Authority will, from the date of initial delivery to the expiration hereof, supply electrical energy to Contractor for municipal purposes and for re-sale. Contractor agrees to purchase from Authority, and Authority agrees to supply, the entire power requirements of Con-[fol. 4024] tractor. Said energy will be delivered in the form of three phase, alternating current at approximately 60 cycles per second and approximately 4,000 volts, or at such voltage as the parties may from time agree. The maximum amount of electricity (called "reserve power"), which Authority agrees to supply within the first two year period is 7,500 kw., but thereafter Contractor shall have the right to increase such maximum demand as herein specified, and Authority shall deliver the same to Contractor. After two years from the date of initial delivery, as Contractor foresees the necessity for more than 7,500 kw. Contractor shall make written demand upon Authority for an increase of reserve power. Such increase shall take effect nine months after date of demand if the amount demanded be less than 5,000 kw. twelve months after date of demand if the amount demanded be over 5,000 kw., and not over 10,000 kw., and two years after date of demand if the amount demanded be in excess of 10,000 kw.

COMPLAINANTS' EXHIBIT 928

4. Conditions of Use and Service.—(a) Point of Delivery: The energy to be supplied Contractor hereunder shall be delivered at the outgoing side of main switch or switches on the low tension side of the main step-down transformers of the substation to be owned and operated by the Authority, and to be located on Lot 170 in the City of Florence, Lauderdale County, Alabama, said lot fronting on Sweetwater and Chestnut Streets in said City, or at such other point as Authority may select which will not occasion greater costs to Contractor.

(b) Grant of Franchise to Authority.—Contractor agrees to grant Authority a franchise, extending to the date of termination of this contract, in a form acceptable to Authority, for the use of the streets and alleys of Contractor for the construction of poles and lines serving Contractor's substation or substations and/or areas outside the corporate limits of Contractor.

[fol. 4025] (c) Joint Use of Poles.—Authority agrees to permit Contractor, subject to such reasonable conditions as Authority may prescribe in the interest of safety and the prevention of electrical interference, to permit Contractor to use Authority's poles within Contractor's corporate limits, within the terms of this contract, for local distribution wires.

(d) Use of Substation Facilities.—Authority agrees, during the term of this contract, to permit Contractor the exclusive use of the 2300 volt portion of the Florence Central Substation, beginning at the load side of Authority's metering apparatus, located on Lot 170 in the City of Florence, together with all equipment and appurtenances. Contractor undertakes, at its own expense, to operate, maintain and repair, and to extend or alter as the situation may require, such substation facilities as are granted for the use of Contractor, and to save Authority harmless with respect thereto. Contractor shall be responsible for any damage to such facilities from any cause whatsoever. Contractor agrees to pay Authority for such use the sum of Twelve Thousand (\$12,000) Dollars, at the rate of Two Hundred (\$200) Dollars monthly beginning two years after the date of initial delivery. All facilities which Contractor

COMPLAINANTS' EXHIBIT 928

may install shall be considered personalty and at the expiration of this contract, Contractor may remove all facilities which it has purchased and installed without expense to Authority.

Authority will from time to time as it contemplates a change in the physical characteristics of the supply system, notify Contractor of the resulting short-circuit characteristics, so that Contractor may govern its use of the aforesaid equipment accordingly. It is understood and agreed that Authority has an option to purchase said Florence Central Substation, and that the covenants of this sub-article are conditioned on the exercise of such option. The obligation of this Subsection shall not bind the general credit or revenue of Contractor but is payable only from revenues of Contractor's electric system. In event of default in Contractor's obligations hereunder Authority may by written notice terminate Contractor's right to the use of the substation facilities above described and Authority may retain all payments theretofore made for such use as liquidated damages.

5. Schedule of Rates.—Attached hereto, and hereby made a part hereof by reference, the same as though physically incorporated herein, is a "Schedule of Rates and Charges". Contractor agrees to pay for the energy supplied by Authority at the rates fixed in Schedule A, entitled "Tennessee Valley Authority Wholesale Power Rates".

6. Resale Rates.—In order to carry out the obligations of Authority with respect to the promotion of a wider use of electricity throughout the area in which it operates, Contractor agrees to charge all of its consumers the rates prescribed for the several classes of consumers in Schedule B, entitled "Tennessee Valley Authority Resale Rates", and not to depart therefrom except with the written consent of Authority, Authority may from time to time prescribe additional resale schedules for special classes of customers or special uses of electricity, and Contractor agrees to be bound thereby. If it should appear that the rates provided for in said schedule with the surcharges provided for therein do not under economical and efficient management by Contractor produce revenues sufficient to maintain the system on a self-supporting and financially sound basis, then upon

COMPLAINANTS' EXHIBIT No. 928

application by Contractor, Authority shall consent to such changes in rates as will provide for such increased revenues as will place the system upon a self-supporting and financially sound basis when operated under economical and efficient management.

[fol. 4027] 7. Rules and Regulations of Authority.—Attached hereto, and hereby made a part hereof by reference, the same as though physically incorporated herein, is a schedule entitled "Schedule of Rules and Regulations", and it is understood that the several provisions of said schedule, as well as the several provisions of this contract and of the Schedule of Rates and Charges, are of the essence of this contract, and that their violation by Contractor renders this contract voidable at the option of Authority, unless such violations are cured upon reasonable notice.

The Schedule of Rules and Regulations is standard and of uniform applicability to all municipal customers of Authority, and the Contractor hereby agrees to be bound during the term hereof, by any future additions or amendments of such Schedule of Rules and Regulations prescribed after conference with representatives of Contractor, the same as though such additions or amendments were incorporated herein. If there should be any conflict between any Rules or Regulations prescribed pursuant to this and the following article, and the terms of this contract, the contract shall control.

8. Rules and Regulations of Contractor.—In the interest of uniformity, and for the protection of both Contractor and Authority, Contractor agrees to adopt and enforce such rules and regulations for the sale of electricity to the public as Authority may, after conference with representatives of Contractor, from time to time prescribe during the term of this contract for uniform application to all of the municipal customers of Authority deemed to have similar characteristics.

9. Declaration of Policy.—This contract is entered into in a spirit of cooperation and with the desire on the part of Authority and Contractor so to administer the relationship established by this contract as to operate to the benefit of Contractor and its residents and of the residents of the

COMPLAINANTS' EXHIBIT 928

[fol. 4028] Tennessee Valley. In furtherance of this cooperative relationship Authority will, by every means within its power, seek to further the economic welfare of Contractor by fostering and promoting the increased use of electricity within Contractor's corporate limits, and by such other means as are provided by law. Contractor agrees to cooperate with Authority in such program within Contractor's area of operation and to work with Authority in furthering the economic well-being of the entire Tennessee Valley. This contract shall be construed and administered in accordance with this statement of policy.

10. Contract Not Transferable.—Neither this contract nor any interest therein shall be transferable or assignable by Contractor to any other party without the consent of Authority, other than by involuntary transfer or assignment pursuant to proceedings brought by a governmental agency to enforce the payment or satisfaction of an indebtedness arising out of money borrowed by Contractor to finance the purchase or construction of its electric distribution plant and/or equipment.

In Witness Whereof, the parties hereto have caused this instrument to be signed and attested by their duly authorized officers, the day and year first above written.

Tennessee Valley Authority, by Arthur Morgan,
Chairman, Board of Directors. (Swidler.)

Attest: C. A. Bock, Secretary (Acting).

City of Florence, by Lee Glenn, President of the
Board of Commissioners, and ex officio Mayor.

Attest: S. B. Howard, City Clerk.

Approved as to form and correctness, as adopted by the
Commission of the City of Florence, Ala.

W. H. Mitchell, City Attorney.

[fol. 4029] COMPLAINANTS' EXHIBIT No. 929

Power Contract Between TVA and the City of Tuscumbia,
Alabama, Dated March 14, 1934

To avoid repetition this exhibit is not set out herein at length. It is substantially the same as the contract between

COMPLAINANTS' EXHIBIT No. 929

TVA and Athens, Alabama (Complainants' Exhibit No. 117) except:

1. It shall continue in effect for thirty years.
2. The contract, in Section 2 thereof, provides:

"Contractor agrees to use all reasonable diligence in acquiring by construction or purchase a municipal distribution system for the City of Tuscumbia with the utmost expedition, and to do all acts and things which it may legally do, which may be necessary or helpful in effectuating such acquisition. Authority agrees, upon request of Contractor, to render to Contractor without compensation such accounting, legal and engineering assistance looking to the acquisition of said system as Authority may deem helpful or advisable."

3. The maximum amount of electricity which TVA agrees to supply within the first two year period is 3000 kw.

4. The point of delivery shall be at a point to be designated by TVA at or near the western boundary of Nitrate Plant No. 2.

[fol. 4030] COMPLAINANTS' EXHIBIT No. 930

Power Contract Between TVA and the City of Sheffield, Alabama, Dated March 14, 1934

To avoid repetition this exhibit is not set out herein at length. It is substantially the same as the contract between TVA and Athens, Alabama (Complainants' Exhibit No. 117) except:

1. It shall continue in effect for thirty years.
2. The contract, in Section 2 thereof, provides:

"Contractor agrees to use all reasonable diligence in acquiring by construction or purchase a municipal distribution system for the City of Sheffield with the utmost expedition, and to do all acts and things which it may legally do, which may be necessary or helpful in effectuating such acquisition. Authority agrees, upon request of Contractor, to render to Contractor without compensation such account-

COMPLAINANTS' EXHIBIT No. 930

ing, legal and engineering assistance looking to the acquisition of said system as Authority may deem helpful or advisable."

3. The maximum amount of electricity which TVA agrees to supply within the first two year period is 4500 kw.

4. The point of delivery shall be at a point to be designated by TVA at or near the western boundary of Nitrate Plant No. 2.

[fol. 4031] COMPLAINANTS' EXHIBIT No. 931

Subpoena Duces Tecum

The President of the United States to Tennessee Valley Authority, Greeting:

You are hereby commanded to appear before the District Court for the Eastern District of Tennessee, Northern Division, in the courtroom of the Federal Building at Chattanooga, Tennessee, on the — day of —, 1937, at — o'clock A. M., and bring with you the following, to wit:

Copy of report of United States Department of the Interior, Bureau of Reclamation, entitled "Economic Height of Norris Dam" by E. B. Debler, Hydraulic Engineer, dated November 1, 1933,

and fail not under penalty of law.

Witness the Honorable Judge of the United States District Court for the Eastern District of Tennessee, this — day of —, 1937.

— — —, Clerk, by — — —.

Let this writ issue. — — —, Presiding Judge.

(Here follows one photolithograph, side folio 4032)

COMPLAINANTS' EXHIBIT NO. 932

COMPARATIVE LOCKAGE TIMES PER LOCK (No allowance for Open River Navigation)

Based partly on witness Barker's total time for single passage through low lift lock of 31 minutes and through high lift lock of 39 minutes.
(Transcript 4669).

A tow consisting of 8 barges and 1 towboat is assumed. To carry 250 to 300 carloads (Transcript 3311) the barges would approximate 175' long by 26' wide, carrying about 800 tons each or a total of 6,400 tons. Four of these barges can enter a lock 60' x 360' at one time as their outside dimensions will be 52' x 350'. In locking, four barges could go through in the first section, four in the second, and the towboat in the third. With a lock 110' x 600', the entire fleet could go through in one operation, as the outside dimensions would not be over 92' x 525'.

<u>Operation</u>	<u>LOCKING TIMES - MINUTES</u>		
	<u>TVA</u>	<u>LOCKS</u>	<u>LOW DAM LOCKS</u>
	<u>60' x 360'</u>	<u>110' x 600'</u>	<u>110' x 600'</u>
Slow down	10	10	10
Stop, tie up, break tow	5		
First Section - enter lock, close lower gates	5	5	4
Fill lock	9	9	3
Open gates - leave lock	5	-	

low lift lock of 31 minutes and through high lift lock of 39 minutes.

(Transcript 4669).

A tow consisting of 8 barges and 1 towboat is assumed. To carry 250 to 300 carloads (Transcript 3311) the barges would approximate 175' long by 26' wide, carrying about 800 tons each or a total of 6,400 tons. Four of these barges can enter a lock 60' x 360' at one time as their outside dimensions will be 52' x 350'. In locking, four barges could go through in the first section, four in the second, and the towboat in the third. With a lock 110' x 600', the entire fleet could go through in one operation, as the outside dimensions would not be over 92' x 525'.

<u>Operation</u>	<u>LOCKING TIMES - MINUTES</u>		
	<u>TVA LOCKS</u> <u>60' x 360'</u>	<u>LOCKS</u> <u>110' x 600'</u>	<u>LOW DAM LOCKS</u> <u>110' x 600'</u>
Slow down	10	10	10
Stop, tie up, break tow	5		
First Section - enter lock, close lower gates	5	5	4
Fill lock	9	9	3
Open gates - Leave lock	5	5	4
Close upper gates - empty lock	12		
Open lower gates	3		
Section Section - enter lock, close lower gates	5		
Fill lock - open upper gates - leave lock	14		
Close upper gates - empty lock	12		
Open lower gates	3		
Towboat - enter lock, close lower gates	5		
Fill lock - open upper gates - leave lock	13		
Make up tow	5		
Get under way	10	10	10
TOTAL TIME - MINUTES	116	39	31

[fol. 4033] , COMPLAINANTS' EXHIBIT No. 933

Diagram entitled "Coal Transfer and Transit Facilities
—Section and Elevation Through Transit Bin and Non-
Overflow Section—Norris Project".

(Original Exhibit)

[fol. 4034]

COMPLAINANTS' EXHIBIT No. 934

3984

Alabama Power Company
Gross Hydro Plant Generation—Kwh.
1932-1936

	Lay Dam	Mitchell Dam	Jordan Dam	Martin Dam	Upper Tallasse	Thurlow Dam	Total Hydro Plant Generation
1932.....	274,939,800	233,115,400	338,890,000	225,889,800	40,556,400	61,860,335	1,175,251,735
1933.....	210,961,000	211,610,000	334,334,000	322,338,000	127,080,000	177,677,420	1,384,000,420
1934.....	304,467,000	300,168,000	486,357,000	213,714,000	92,629,000	146,665,897	1,544,000,897
1935.....	324,855,000	260,835,000	476,923,000	290,430,000	127,347,000	207,452,007	1,687,842,007
1936.....	303,285,000	272,082,000	441,466,000	332,290,000	139,743,000	206,010,379	1,694,876,379
Total 5 Yrs.....	1,418,507,800	1,277,810,400	2,077,970,000	1,384,661,800	527,355,400	799,666,038	7,485,971,438

(Here follows 1 photolithograph, side folio 4035)

4035

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COMPARATIVE LOCKAGE TIMES - TENNESSEE RIVER

(From Paducah, Ky. to Knoxville, excluding
Lock No. 1, Florence Canal, Wilson Lock
and Pool, Hale's Bar Lock and Pool; common
to both projects)

<u>POOL SECTION</u>	<u>Number of Locks</u>	<u>LOW DAM PLAN (1)</u>		<u>Av. Net Looking Time - Minutes</u>	<u>TVA PLAN (2)</u>	
		<u>Theoretical Looking Time - Minutes (3)</u>	<u>Average Duration of of Open River Navigation -%</u>		<u>Looking Time - Minutes</u>	
					<u>Hale's Bar Lock Size Tow (4)</u>	<u>8 Barge Tow (5)</u>
Gilbertsville	4	124	58.0	52.0	39	39
Pickwick	3	93	13.0	81.0	39	39
Wheeler	4	124	10.0	111.6	39	116
Guntersville	4	124	33.75	82.1	39	116
Chickamauga	4	124	22.0	96.7	39	116
Watt's Bar	7	217	21.7	170.0	39	116
Coulter Shoals	6	186	17.0	154.4	39	116
Total Time - Minutes				747.8	273	658
Total Time - Hours				12.46	4.55	10.96

Notes:

1. Low Dam Plan as authorized by River and Harbor Act of July 3, 1930.
2. Tennessee Valley Authority Unified Plan as reported to Congress March 31, 1936.
3. Number of locks multiplied into 31 minutes - Witness Barker's low lift looking time. This is for single lockage and will apply to either size tow herein considered.
4. Time based on witness Barker's high lift looking time - 39 minutes; tow assumed to be of a size to pass through Hale's Bar Lock without breaking.
5. Time based on previous exhibit entitled "Comparative Lockage Times per Lock" - 8 barge tow.

COMPLAINANTS' EXHIBIT NO. 935

[fol. 4036] COMPLAINANTS' EXHIBIT No. 936 (Excluded)
House Document 306, 74th Congress, 1st Session
(Original Exhibit)

3986

(Here follow four photolithographs, side folios 4037-4040)

COMPLAINANTS' EXHIBIT NO. 937 (EXCLUDED)

PROPOSED SUBSCRIBERS--HIGH-WAY # 15.

KIMEGAR STATION to KELSO.

Highway	J. J. Meyers	8.00
	Byrd Douglas	8.00
	J. M. Shelton	8.00
	A. Taylor	8.00
	G. Hopkins	8.00
	R. F. Gray	2.00
	A. L. Newman	2.00
	Gray & Newman	2.00
	W. T. Benson	2.00
	T. J. Winford	2.00
	Kelso Mkt. Co.	1.50
	Mo. P. Cowley Jr.	8.00
	Cowley Store	2.00
	J. D. Thompson	1.00
	W. L. Loyd	1.00
	Peoples Bank	2.00
	M. R. Grabtree	1.50
	Jno Pigg	1.00
	V. Howard	1.00
	Howard Service	1.00
	G. D. Cowley	2.00
	H. Campbell	2.00
	Mrs Lora Fry	1.00
	Church	2.00
	School	2.00
	R. D. Cowley	2.00

10 B Smith

4.00
\$81.00

4 Cowley

1.00

3 Solomon 1.00
1900 (1.00) 1.00

78
4
82
1.00
80.50

COMPLAINANTS' EXHIBIT No. 937 (Excluded)

Flintville Supplementary List

	Res.
Yost Mulligan	\$1.25
John Evans -	1.25
C. P. Church	1.25
M. E. Church	1.25

Raymond Snow 120 -
6.25

5	-	6.25
16		49.25
38		22.25
59	Customer	79.25

60 customers
60 per household

V Frank Alden ✓
 H J Bryant ✓
 Mrs Fannie Luttrell ✓
 H M Copeland ✓
 M J Currey ✓
 J W Cunningham ✓
 J R Mason ✓
 J Copeland ✓
 John Whitworth ✓
 R D Armstrong ✓
 J F Copeland ✓
 Copeland Bros Garage ✓
 W A Styles ✓
 M E Cla Styles ✓
 M Anna Sims ✓
 " Micks ✓
 A A Kalmes ✓
 W W Pylant ✓
 E R Stephenson ✓
 Horace Coats ✓
 E L Hudson ✓

22

1 11
 2 50
 1 50
 1 25
 2 75
 1 75
 1 25
 1 25
 1 25
 5 00
 1 25
 1 25
 3 00
 1 25
 1 25
 1 25
 5 00
 1 25
 2 00
 1 25
 2 50
 99.45

J. H. MILNER & SON

GENERAL MERCHANDISE

LADIES' & GENTS' READY-TO-WEAR
WHOLESALE PRODUCE

Flintville, Tenn. ✓

List

Wm. Lottell ✓	1.25
Jno. Brown ✓	5.00
Mr J. E. Braden ✓	1.25
Twinn Auguston	1.25
Baptist Church	1.25
H A Durham	1.25
J M Allen	1.25
G C Schroder	1.25
W R Taylor	1.25
Ben Copeland	1.25
School	1.25
Fred Rowe	1.25
W K Foster	1.25
A N Jowry	1.25
Ames Hudson	1.25
	<u>1.25</u>

16

16

$$\begin{array}{r} 22 \\ 16 \\ \hline 38 \end{array}$$
[illegible]

[fol. 4041] COMPLAINANTS' EXHIBIT No. 938 (Excluded)

June 2, 1932.

Memorandum Covering Proposed Electric Service to Elora, Tennessee, Flintville, Tennessee, U. S. Fish Hatchery in Warren Hollow, Kelso, Tennessee

Property of J. J. Moyers on New Highway #15 (Near Fayetteville), Property of Tom Bagley on New Highway #15 (Near Fayetteville)

A considerable amount of investigation and preliminary work has been done in connection with proposed electric service to Elora from Huntland and since this subject has been under discussion for a period of one and one-half years, it might be well to review the matter from the beginning.

History:

In December 1930 two estimates were prepared covering the construction of 6.3 miles of 11,000 volt line from Huntland to Elora with a distribution system for approximately 74 customers in Elora. One estimate, amounting to \$10,270, covered a single phase line with distribution and the other, amounting to \$13,930, covered a three phase line with distribution. The reason for two estimates being, that if the cotton gin load could be secured in Elora, a three phase line would be needed. In March 1931 the above estimates were revised in detail with resulting amounts of \$11,130 and \$14,050 respectively.

In July 1931 it was thought that possibly Elora might be served to better advantage by a line out of Fayetteville inasmuch as the communities of Kelso and Flintville could be served along the way. A survey was then made and alignment plotted for a route from Fayetteville via new highway #15, Flintville and Elora to Huntland. Also plane table surveys were made of Kelso, Flintville and Elora. The attached sketch shows the relative location of these towns.

Sufficient revenue, however, could not be obtained to justify building extensions to these communities so the matter was dropped for the time being.

COMPLAINANTS' EXHIBIT No. 938 (Excluded)

In February of this year the question was again reopened due to a petition being received from parties at Fayetteville asking for electric service for the farmers along new highway #15, for the new U. S. Government Fish Hatchery in Warren Hollow and for the communities of Kelso and Flintville.

Correspondence following this petition indicates that one J. J. Moyers is taking the lead in the matter and inspection of the highway maps indicates that he together with Mr. Tom Bagley own over a mile frontage on new highway #15 about 3 miles out from Fayetteville. Since this is a new highway there are very few houses near it. Under date of February 24, 1932, Mr. Moyers wrote a letter to Hon. Erwin L. Davis at Washington about the matter, the closing paragraph of which reads as follows:

[fol. 4042] "I am asking that for the benefit of the Fish Hatchery and the farmers from Fayetteville to Kelso along Route #15 that you use your influence with the Tennessee Power Company in the manner you see fit."

Under date of April 4, 1932, Mr. Moyers wrote Mr. Bunn, local manager at Fayetteville, again expressing his desire for electric service.

Present Status:

The writer has discussed the proposition of service to this territory with Messrs. Parks and Watson and their distribution engineers and has also gone over the whole matter in the field. It is believed that the following represents the combined views of all on the subject.

Considering the number of miles of line to be built, the character of load to be served and the relative small number of customers this territory is rather lean. For this reason no general comprehensive plan for service to this section is warranted at this time and any extensions should be made on an individual basis. Our views on the prospective loads are as follows:

Elora (74 Prospective Customers):

This town located 6.7 miles from Huntland and 18.7 miles from Fayetteville, along the surveyed route, is the best prospect in the entire section, nevertheless it would be hard

COMPLAINANTS' EXHIBIT No. 938

to justify an extension even to it at the present time. In December 1930 when the proposition was most active, a guaranteed revenue of about \$81.00 per month was secured, the estimated construction cost at that time being \$10,270. Using our most economical rural construction we could probably serve them today for around \$8,000, which on the 2% minimum plan would call for a guaranteed revenue of \$160.00 per month. Elora located near the Alabama line depends on cotton for her income and under present economic conditions it is doubtful that the residents would be able to guarantee twice the revenue they did in 1930. We expect to keep working on the proposition though and sooner or later it may materialize. The logical method of serving Elora is with 11 kv. from Huntland.

Flintville (54 Prospective Customers):

Service to this town which is located about half way between Huntland and Fayetteville depends on our making the extension from Huntland to Elora. We could then build up the highway at 11 kv. from Elora and serve Flintville at about the same guarantee per customer as required in Elora.

U. S. Government Fish Hatchery:

Correspondence with Mr. Henry O'Malley, U. S. Commissioner of Fisheries indicates that their requirements will be relatively small. A copy of his letter to Mr. Shultz on the matter is attached. The cost of serving this load at present with a special line would be prohibitive. In the event, however, that we should get service into Flintville it might be possible to work out a satisfactory proposition with the Fish Hatchery at that time.

[fol. 4043] Kelso (20 Prospective Customers):

Kelso with 20 prospective customers could be most economically served from the end of the Joe Smith line, however, in view of the future possibilities along highway #15 from Fayetteville it might be more practical to use the latter route though longer. A minimum of \$3500 would be required to serve Kelso which on the 2% plan would amount to a guarantee of \$70.00 per month of \$3.50 per customer. It

COMPLAINANTS' EXHIBIT No. 938 (Excluded)

would not be possible to secure such a guarantee at this time.

J. J. Moyer & Tom Bagley Property:

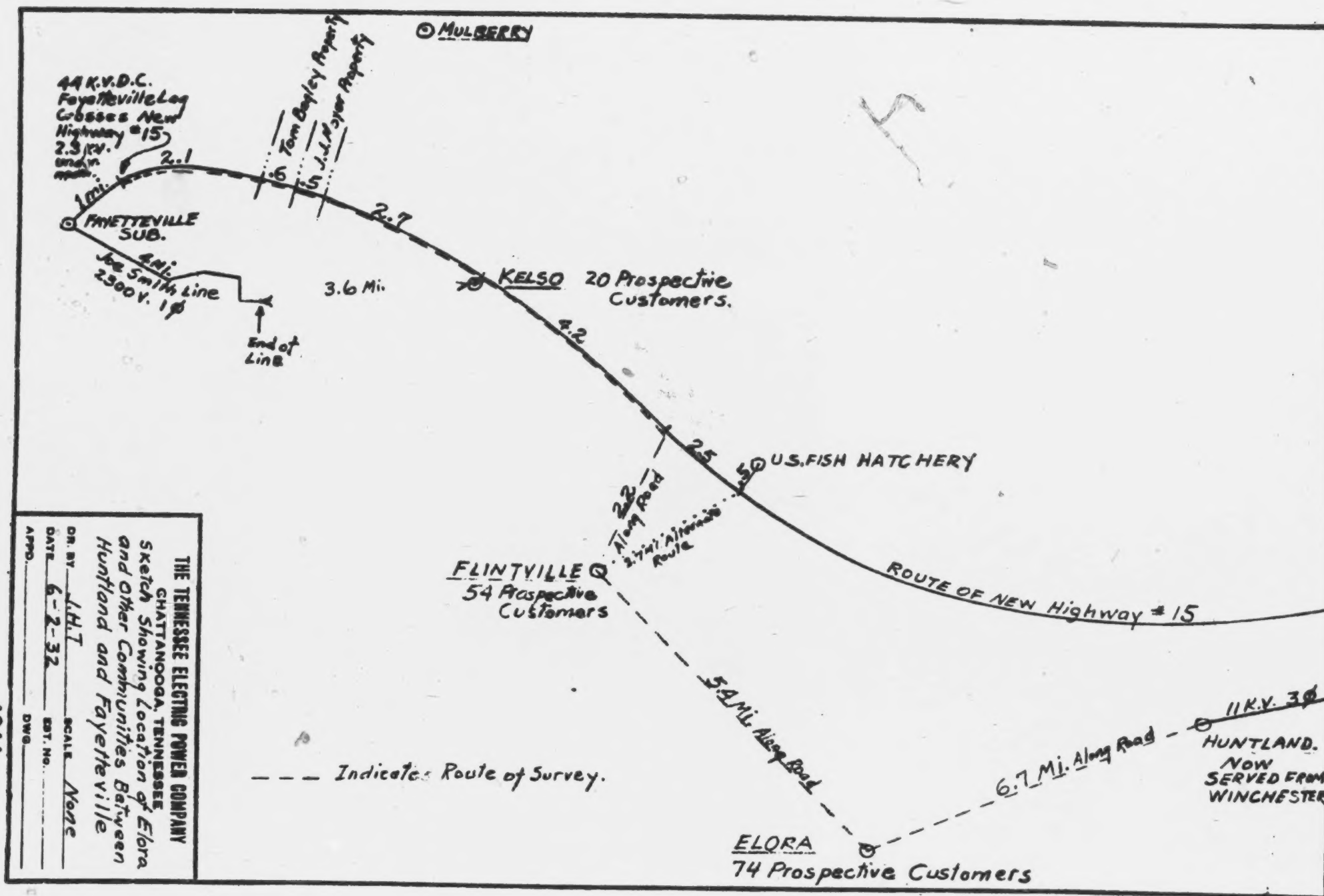
These properties could be most economically served by an extension down new highway #15 which would tap off of the present Fayetteville-Mulberry line. As shown the Fish Hatchery and load would have little bearing on reducing the cost of the extension desired by Mr. Moyer. If these gentlemen with their neighboring property owners can secure sufficient guarantee to cover the construction of 3.2 miles of 2300 volt line it would be an easy matter to serve them.

In this event we might be able to extend the line on down to Kelso which would be about the limit for 2300 volt transmission.

Conclusions:

1. The prospects of securing profitable business in this territory at the present time are not very good but we expect to keep on working on it.
2. Elora is the best prospect of all and the Cumberland District will continue their efforts to serve them.
3. Service to the Fish Hatchery without special financial arrangements is prohibitive until service is made available at Flintville.
4. Service to properties of Messrs. J. J. Moyers and Tom Bagley depends on their ability to finance the proposition and the fact that Kelso and the Fish Hatchery are potential customers does not make proposed service to their properties any more attractive.
5. If Messrs. Moyer and Bagley feel that a proposition could be worked out with them and the farmers along Route #15 whereby they would guarantee sufficient revenue to construct a line we will be glad to work with them and prepare estimates to serve such customers as are interested. Our survey made in July 1931 shows no houses along new highway #15 between Fayetteville and Kelso a distance of nearly 6 miles. The properties of Messrs. Moyers and Bagley are located in this section.

(Here follows one photolithograph, side folio 4044)



THE TENNESSEE ELECTRIC POWER COMPANY
CHATTANOOGA, TENNESSEE
*Sketch Showing Location of Elora
and Other Communities Between
Huntsdon and Fayetteville*

DR. BY A.H.T SCALE None
DATE 6-2-32 EST. NO. _____
APPRO. _____ DWG. _____

4044

COMPLAINANTS' EXHIBIT No. 939 (Excluded)

[fol. 4045] COMPLAINANTS' EXHIBIT No. 939 (Excluded)

Letterhead of Railroad and Public Utilities Commission
of the State of Tennessee

November 10, 1932.

Mr. Joe C. Guild, Jr., V. P. & Gen. Mgr., The Tennessee
Electric Power Company, Chattanooga, Tennessee.

DEAR MR. GUILD:

I am enclosing copy of report made by Mr. Beatty, Assistant Engineer of the Commission, relative to estimated cost of proposed extensions at Mulberry and Fayetteville, Tennessee.

I understand that the Company has made an investigation of the proposed extensions and refer you to your letter of September 2, 1932 addressed to Mr. John B. Southall, Supt. of Construction for the Government Bureau of Fisheries, Fayetteville, Tennessee. We wish that you would have this extension investigated again and take up with Mr. Moyers of Fayetteville the requirements necessary to secure the extension. You will find in Mr. Beatty's report to me his estimate of the cost of making the necessary installation to render the service. We trust that sufficient business may be secured to justify this extension.

Yours very truly, (Signed) Malcolm R. Williams,
Engineer.

MRW/b.

[fol. 4046] Letterhead of Railroad and Public Utilities Commission of the State of Tennessee

Memphis, Tennessee,
September 27, 1932.

Mr. M. R. Williams, Engineer, Railroad and Public Utilities Commission, Nashville, Tennessee.

Rural Extension, Fayetteville, Tennessee

DEAR MR. WILLIAMS:

In accordance with your instructions, I was in Fayetteville on the 16th and accompanied by Mr. Moyers of that

COMPLAINANTS' EXHIBIT No. 939 (Excluded)

City, Mr. Southall with the Gov. Bureau of Fisheries and Mr. Bunn of the Tennessee Electric Power Co. made investigations regarding the feasibility of extending the Power Company's lines East on Highway #15 approximately 12 miles to serve the Fish Hatchery and also the towns, Kelso and Flintville, along the way.

It is my understanding that the Power Company's Engineers have made some previous estimate for the building of a 11000 volt line through Kelso to the Hatchery but not including Flintville. My estimate is based on extending a single phase 2300 volt line from a point approx. two miles East of Fayetteville, known as Renegar Station, through Kelso to the Gov. Hatchery and also a tap off this line approx. two miles in length to reach Flintville. This estimate covers complete cost of distribution systems in both Flintville and Kelso and amounts to a total of \$11,689.84 made up as follows:

to and including Kelso	\$4,527.92
add to include Flintville	5,424.53
“ “ “ Gov. Hatchery	1,737.39
making a total of	<u>\$11,689.84</u>

The attached sheets will show what the Proposed Subscribers have signified thier willingness to pay. You will note Kelso has subscribed \$83.00, Flintville, though there are some errors in th-r set up \$72.50 and it is my understanding the Hatcheries will use about \$30.00 worth of energy making a total of \$185.50 which, on the 2% basis, falls short of the required amount by approximately \$50.00.

I was informed, while in Fayetteville, that the Power Co. proposes to make further investigation regarding this matter and it may be that the probable future business will be sufficient to justify.

Respectfully submitted, Charlie Beatty, Assistant Engineer.

[fol. 4047] COMPLAINANTS' EXHIBIT No. 940 (Excluded)

Memorandum as to the Feasibility of Extending a 2300 Volt Single Phase Line from Fayetteville to Serve the Communities of Kelso, Flintville and the U. S. Government Fish Hatchery

1. As shown on the attached sketch it is approximately 13.3 miles from the Fayetteville substation to Flintville along a practical distribution line route.

2. 2300 volt single phase transmission for this distance is considered very uneconomical and impractical by distribution engineers.

3. With a single phase #4 copper 2300 volt line, calculations show that with the present load at Mulberry and estimated loads taken on at Kelso, Flintville and Fish Hatchery a regulation of 30% and a voltage of 94 would result at Flintville. This type of service would be useless.

4. With a single phase #4 copper 2300 volt line extended to Flintville and with estimated loads taken on at Kelso and the Fish Hatchery, it would only be possible to deliver 2 Kva. to Flintville with a satisfactory voltage regulation (11.4%). This would mean that one small electric stove would load the line to capacity.

5. The economical voltage to supply this load is 11,000 volts. This voltage is not now available at Fayetteville and the cost of the necessary substation changes together with the cost of an 11 kv. line would make the extension to Flintville prohibitive.

The sketch is the same as that contained in Complainants' Exhibit No. 938.

[fol. 4048]

COMPLAINANTS' EXHIBIT No. 941

Floods Which Have Occurred Between Apr. 15 & Nov. 30 on Rivers In and Near
Tennessee River Basin During the Period of Stream Flow Records

High Flood

River	Station	Refer- ence	Drainage Area Sq. Mi.	Flood Stage Ft.	Stage Ft.	Discharge C. F. S.	Discharge per Sq. Mi. C. F. S.	Date
Mississippi	Cape Girardeau, Mo.	H-8	712,155	30	42.5	Maximum		7-4-1844
Ohio	Cauro, Ill.	G-7	203,943	40	56.4	Max. before 1937		4-20-1927
New	Eggleson, Va.	A-180	2,945		39.5	Max. 152,000	51.6	7-16-1916
New	Eggleson, Va.	A-180	2,945		31.1	Max. 109,000	37.0	10-27-1918
Kanawha	Kanawha Falls, W. Va.	A-181	8,367		37.8	Max. 270,000	32.3	9-14-1878
Kanawha	Kanawha Falls, W. Va.	A-183	8,367		34.5	242,000	28.9	5-23-1901
Cumberland	Nashville, Tenn.	A-198	12,860		51.4	165,000	12.8	4-18-1905
Cumberland	Nashville, Tenn.	A-198	12,860		49.6	154,000	12.0	4-17-1874
French Broad	Dandridge, Tenn.	H-8	4,450	12	28.0	Maximum		5-21-1901
Tennessee	Knoxville, Tenn.	A-202	8,990		34.8	188,000	20.9	5-23-1901
Little Tennessee	McGhee, Tenn.	A-214	2,470		22.2	70,000	28.4	11-19-1906
Cape Fear	Fayetteville, N. C.	B-86	4,290		68.0	Max. 133,000	31.0	8-20-1908
Cape Fear	Fayetteville, N. C.	E-70	4,290		63.4	Max. 107,000	24.9	9-21-1928
Cape Fear	Fayetteville, N. C.	B-86	4,290		63.43	110,000	25.6	10-4-1929
Yadkin	Salisbury, N. C.	A-155	3,400		23.8	Max. 121,000	35.6	7-18-1916
Yadkin	Salisbury, N. C.	A-155	3,400		16.9	Max. 80,000	23.5	7-20-1919
Pee Dee	Cheraw, S. C.	G-3	7,432	30	47.2	Maximum		8-27-1908
Pee Dee	Rockingham, N. C.	C-106	6,910		24.38	Max. 212,000	30.7	9-19-1928
Pee Dee	Rockingham, N. C.	D-100	6,910		20.53	165,000	23.9	10-3-1929
Catawba	Catawba, S. C.	G-3	3,502	11	40.4	Maximum		7-17-1916
Wateree	Camden, S. C.	B-108	5,010	23	38.4			8-1-1908
Wateree	Camden, S. C.	B-108	5,010	23	40.4	Maximum		7-18-1916
Wateree	Camden, S. C.	B-108	5,010		36.2	199,000	39.8	10-3-1929

Broad.....	Richtex, S. C.....	E-95	4,800	30.0	222,000	46.2	8-17-1923
Broad.....	Richtex, S. C.....	B-114	4,800	30.7	Max. 228,000	47.5	10-3-1929
[fol. 4049]							
Congaree.....	Columbia, S. C.....	G-3	7,807	19	Maximum		8-27-1903
Santee.....	Ferguson, S. C.....	B-109	14,800	24.5	Max. 368,000	24.9	7-22-1916
Santee.....	Ferguson, S. C.....	F-67	14,800	20.6	251,000	17.0	8-22-1923
Santee.....	Ferguson, S. C.....	D-108	14,800	21.04	263,000	17.8	10-7-1929
Savannah.....	Augusta, Ga.....	F-80	7,304	38.7	310,000	42.5	9-11-1883
Savannah.....	Augusta, Ga.....	H-4	7,304	38.8			8-27-1903
Savannah.....	Augusta, Ga.....	D-130	7,304	45.1	Max. 350,000	48.0	10-3-1929
Cocosa.....	Childersburg, Ala.....	B-188	8,390		121,000	14.4	7-11-1916
Black Warrior.....	Tuscaloosa, Ala.....	B-203	4,830	67.7	Max. 215,000	44.5	4-18-1900
Black Warrior.....	Tuscaloosa, Ala.....	D-234	4,830	65.1	166,000	34.4	11-15-1929

References: (A) Geological Survey Water Supply Paper 771, "Floods in the United States."

Following Geological Survey Water Supply Papers, "Surface Water Supply of the United States, South Atlantic Slope and Eastern Gulf of Mexico Basins":

(B) W. S. Paper 757	Year 1934
(C) " " 712	" 1931
(D) " " 697	" 1930
(E) " " 682	" 1929
(F) " " 662	" 1928
(G) "Daily River Stages"—U. S. Weather Bureau, Volume XXXIII	Year 1935.
(H) " " " "	XXIII " 1925

Figure with a reference refers to page of the reference.

[fol. 4050] COMPLAINANTS' EXHIBIT No. 942

Table of weekly loads of complainant companies for 1937

Weekly Loads of Complainant Companies

For Year 1937

Carolina Power & Light Company			Tennessee Eastern Electric Co.		
Memphis Power & Light Company			Alabama Power Company		
Tennessee Public Service Company			West Tennessee Power & Light Co.		
Holston River Electric Company			Birmingham Electric Company		
Appalachian Electric Company			Mississippi Power Company		
Kentucky Tennessee Light & Power Co.			The Tennessee Electric Power Co.		
Kentucky & West Virginia Power Co.			Southern Tennessee Power Company		
Kingsport Utilities			Franklin Power & Light Company		
East Tennessee Power & Light Co.			Mississippi Power & Light Company		
Week of Year	Month	Millions kwhrs	Week of Year	Month	Millions kwhrs
1	Jan.	128.43	27	July	118.64
2		129.98	28		129.49
3		130.11	29		130.32
4		126.86	30		129.85
5		122.51	31		130.49
6	Feb.	126.37	32	Aug.	128.59
7		127.12	33		129.94
8		128.17	34		130.25
9		128.73	35		129.54
10	Mar.	128.75	36	Sept.	124.30
11		129.77	37		131.13
12		129.93	38		130.80
13		126.53	39		132.98
14	Apr.	124.62	40		133.50
15		125.06	41	Oct.	132.03
16		125.13	42		129.44
17		126.22	43		129.02
18		126.19	44		126.71
19	May	127.64	45	Nov.	123.66
20		126.99	46		123.34
21		127.69	47		117.58
22		127.37	48		117.84
23	June	127.80	49	Dec.	122.81
24		128.45	50		124.77
25		129.48	51		121.12
26		129.04	52		104.79

Grand Total for Year 1937..... 6,597.87

The chart accompanying the above table is an original exhibit.

[fol. 4051] COMPLAINANTS' EXHIBIT No. 943

The Charter of Incorporation of Lee County Electric Power Association

1. The corporate title of said company is: Lee County Electric Power Association.

2. The names of the incorporators are: Gene Watson, Postoffice, Guntown, Miss.; S. P. Evans, Postoffice, Tupelo, Miss.; J. C. Partlow, Postoffice, Plantersville, Miss.; Keith

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Barnett, Postoffice, Shannon, Miss.; Lee Riley, Postoffice, Saltillo, Miss.; A. L. Burdine, Postoffice, Verona, Miss.; Byron Long, Postoffice, Tupelo, Miss.; G. W. Ruff, Tupelo, Miss.; A. L. Gregory, Saltillo, Miss.; N. B. Buchanan, Tupelo, Miss.; J. G. Underwood, Guntown.

3. The domicile is at Tupelo, Mississippi.

4. Amount of capital stock and particulars as to class or classes thereof: This corporation is organized without capital stock and is to issue no shares and is not to engage in business for profit, but shall function as a civic improvement company or association.

This corporation shall not be required to make publication of its charter, shall issue no shares of stock, and shall divide no dividend or profit among its members. Expulsion shall be the only remedy for non-payment of dues and each member shall have the right to one vote in the election of all officers. The loss of membership by death or otherwise terminates all interest of such member in the corporate assets, and there shall be no individual liability against members for corporate debts, but the entire corporate property shall be liable for claims of creditors.

5. Number of shares for each class and par value thereof: None.

6. The period of existence (not to exceed fifty years) is Fifty years.

7. The purpose for which it is created: The purpose or object of this corporation shall be the following:

Section 1. To construct, purchase, add to, maintain, conduct and operate electric light and power distributing systems for the purpose of furnishing light and power service to the members of this corporation at cost and without profit.

Section 2. To acquire, erect, maintain and operate poles, wires, lines, conduits, transformers, lamps, motors, dynamos, and all other appurtenances necessary for distributing electricity for aforesaid purposes.

COMPLAINANTS' EXHIBIT No. 943

[fol. 4052] Section 3. To purchase such electricity from others for its own use and for the purpose of distributing the same to its members, only, at cost without profit.

Section 4. To acquire real or personal property, by purchase or otherwise, and to hold, sell, mortgage, or otherwise dispose of the same, to borrow money on bonds, notes or otherwise, for corporate uses, to acquire privileges and franchises, and to sell those now owned or hereinafter to be owned and generally to perform anything which may be necessary for the promotion of the objects hereinbefore stated.

Section 5. To apply for, and obtain, any franchise necessary for carrying out and making effective these Articles of Incorporation.

Section 6. To adopt by-laws, and to amend or repeal same.

Section 7. To promote the construction of electric power lines to the various communities of Lee County for the purpose of securing and distributing electric power from the Tennessee Valley Authority or others, to promote the use of electric power in every way possible and to cooperate with the Tennessee Vally Authority to this end.

The rights and powers that may be exercised by this corporation, in addition to the foregoing, are those conferred by Chapter 24, Code of Mississippi of 1906, and House Bill No. 655, Laws of Mississippi of 1928, and Chapter 100, Code of Mississippi of 1930.

8. Number of shares of each class to be subscribed and paid for before the corporation may begin business. None.

Byron Long, Tupelo, Miss.; Keith Barnett, Shannon, Miss.; S. P. Evans, Tupelo, Miss.; Gene Watson, Guntown, Miss.; A. L. Gregory, M. D., Saltillo, Miss.; Jno. G. Underwood, Guntown, Miss.; J. C. Partlow, Plantersville, Lee Riley, Saltillo, Miss.; Geo. W. Ruff, Tupelo, Miss.; A. L. Burdine, Verona, Miss.; N. B. Buchanan, Tupelo, Miss.; Incorporators.

COMPLAINANTS' EXHIBIT No. 943

Acknowledgment

STATE OF MISSISSIPPI,
County of Lee:

This day personally appeared before me, the undersigned authority Byron Long, Keith Barnett, S. P. Evans, Gene Watson, A. L. Gregory, M. D., Jno. G. Underwood, Joe Partlow, Lee Riley, Geo. W. Ruff, A. L. Burdine, N. B. Buchanan, incorporators of the corporation known as the Lee County Electric Power Association, who acknowledged that they signed and executed the above and foregoing articles of incorporation as their act and deed on this the 8th day of Jan., 1934.

G. W. Ballard, Ci. Clerk, by, Chas. Patrick, D. C.

[fol. 4053] Amendment to Charter of Incorporation of Lee
County Electric Power Association

Under and by virtue of resolution passed by the stockholders, incorporators and members of the Lee County Electric Power Association of Tupelo, Lee County, Mississippi, on the 24th day of July, 1935, authorizing the same, the charter of incorporation of the Lee County Electric Power Association, which said corporation is domiciled at Tupelo in Lee County, Mississippi and which was incorporated on the 26th day of February, 1934, and the charter of which is recorded in book 33-34, pages 526 and 527 of the records of incorporations in the office of the Secretary of State, Jackson, Mississippi, is hereby amended so as to change the name of said corporation from that of "Lee County Electric Power Association" to "Tombigbee Electric Power Association."

Section seven (7) of said charter is amended to read as follows:

7. The purpose for which it is created:

The purpose or object of this organization shall be the following:

Section 1. To construct, purchase, add to, maintain, conduct and operate electric light and power distributing systems for the purpose of furnishing light and power service

COMPLAINANTS' EXHIBIT No. 943

to the members of this corporation at cost and without profit.

Section 2. To acquire, erect, maintain and operate poles, wires, lines, conduits, transformers, meters, lamps, motors, dynamos, and all other appurtenances necessary for distributing electricity for aforesaid purpose.

Section 3. To purchase electricity and electrical appliances from others for its own use and for the purpose of distributing same to its members only at cost without profit.

Section 4. To acquire real or personal property by purchase or otherwise, and to hold, sell, mortgage, or otherwise dispose of the same, to borrow money on bonds, notes or otherwise, for corporate uses, to acquire privileges and franchises and to sell those now owned or hereafter to be owned and generally to perform anything which may be necessary for the promotion of the objects hereinbefore stated.

Section 5. To apply for, and obtain, any franchise necessary for carrying out and making effective these Articles of Incorporation.

Section 6. To adopt by-laws, and to amend or repeal same.

[fol. 4054] Section 7. To promote the construction of electric power lines to the various communities in Lee and Itawamba counties and vicinities for the purpose of securing and distributing electric power from the Tennessee Valley Authority or others and to promote the use of electric power in every possible way throughout the said area and to cooperate with the Tennessee Valley Authority to this end.

Keith Barnett, President. W. C. Inzer, Secretary.

STATE OF MISSISSIPPI,

County of Lee:

This day personally appeared before the undersigned Keith Barnett, President and W. C. Inzer, Secretary of the Corporation known as Lee County Electric Power Association, who acknowledged that they signed and executed the above and foregoing amendment to the charter of said corporation on the day and date therein set forth.

Witness my signature and seal this the 29th day of July, 1935.

W. H. Patton, Notary Public (Seal.)

[fol. 4055] **COMPLAINANTS' EXHIBIT No. 944**

Certificate of Incorporation, issued by the State of Mississippi to Alcorn County Electric Power Association.

(Omitted)

COMPLAINANTS' EXHIBIT No. 945

Certificate of Incorporation, issued by the State of Mississippi to Monroe County Electric Power Association.

(Omitted)

COMPLAINANTS' EXHIBIT No. 946

Certificate of Incorporation, issued by the State of Mississippi to Pontotoc County Electric Power Association.

(Omitted)

[fol. 4056] **COMPLAINANTS' EXHIBIT No. 947**

Certificate of Incorporation, issued by the State of Mississippi to Prentiss County Electric Power Association.

(Omitted)

COMPLAINANTS' EXHIBIT No. 948

Certificate of Incorporation, issued by the State of Mississippi to Tishomingo County Electric Power Association.

(Omitted)

COMPLAINANTS' EXHIBIT No. 949-50

Certificate of Incorporation, issued by the State of Mississippi to Four County Electric Power Association.

(Omitted)

COMPLAINANTS' EXHIBIT No. 951

Certificate of Incorporation, issued by the State of Mississippi to Tippah Electric Power Association.

(Omitted)

[fol. 4057] COMPLAINANTS' EXHIBIT No. 952

Certificate of Incorporation, issued by the State of Mississippi to Tippah Electric Power Association.

(Omitted)

COMPLAINANTS' EXHIBIT No. 953

Certificate of Incorporation, issued by the State of Mississippi to Northeast Mississippi Electric Power Association.

(Omitted)

[fol. 4058] COMPLAINANTS' EXHIBIT No. 954

Subpoena Duces Tecum

The President of the United States to Tennessee Valley Authority, Greeting:

You are hereby commanded to appear before the District Court for the Eastern District of Tennessee, Northern Division, in the courtroom of the Federal Building at Chattanooga, Tennessee, on the — day of —, 1937, at — o'clock A. M., and bring with you the following, to wit:

Navigation, flood control and hydro-electric program summary on pp. 7 and 8, including justification of estimates, the plan and profile exhibit on p. 9, the principal features exhibit on p. 10, the channel depth exhibit on p. 11, power demand and capacity exhibit on p. 14, proposed program of dam construction on p. 15, the structures and improvement detail for Gilbertsville Dam and Reservoir on p. 30, structures and improvement detail for electrical plant and

COMPLAINANTS' EXHIBIT No. 954

equipment on p. 31 and transmission and distribution exhibit on p. 32 of TVA detailed statement of budget estimates for the fiscal year ending June 30, 1939, submitted to Congress in December, 1937,

and fail not under penalty of law.

Witness the Honorable Judge of the United States District Court for the Eastern District of Tennessee, this — day of —, 1937.

— —, Clerk, by — —.

Let this writ issue. — —, Presiding Judge.

[fol. 4059] COMPLAINANTS' EXHIBIT No. 955

Subpoena Duces Tecum

The President of the United States to Tennessee Valley Authority, Greeting:

You are hereby commanded to appear before the District Court for the Eastern District of Tennessee, Northern Division, in the courtroom of the Federal Building at Chattanooga, Tennessee, on the — day of —, 1937, at — o'clock A. M., and bring with you the following, to wit:

Tennessee Valley Authority's detailed statement of budget estimates for the fiscal year ending June 30, 1939, submitted to Congress in December, 1937, containing pages 1 to 47, both inclusive,

and fail not under penalty of law.

Witness the Honorable Judge of the United States District Court for the Eastern District of Tennessee, this — day of —, 1937.

— —, Clerk, by — —.

Let this writ issue. — —, Presiding Judge.

[fol. 4060] COMPLAINANTS' EXHIBIT No. 956

Subpoena Duces Tecum

The President of the United States to Tennessee Valley Authority, Greeting:

You are hereby commanded to appear before the District Court for the Eastern District of Tennessee, Northern Division, in the courtroom of the Federal Building at Chattanooga, Tennessee, on the — day of —, 1937, at — o'clock A. M., and bring with you the following, to wit:

1. Minutes of the Board of Directors of Tennessee Valley Authority approving recommendations or reports relating to methods of operating Norris or Wheeler Dams or any other dams embraced in the Unified Plan now under construction or recommended for construction by the Authority or establishing rule curves for the filling or lowering of the reservoirs at any of said dams or relating to water control thereat, and any corporate minutes directing the means and manner of water control at any of said dams from July 1, 1935, to date.

2. Minutes of any meetings of the Board of Directors of Tennessee Valley Authority prescribing levels at any of the reservoirs at dams constructed under the Unified Plan reported to Congress March 31, 1936, other than such minutes as are already in evidence,

and fail not under penalty of law.

Witness the Honorable Judge of the United States District Court for the Eastern District of Tennessee, this — day of —, 1938.

— — —, Clerk, by — — —.

Let this writ issue. — — —, Presiding Judge.

[fol. 4061] COMPLAINANTS' EXHIBIT No. 957

Resolutions by the Board of Directors of TVA Approving Water Control Bulletins Nos. 3, 4, 5, 6, 7 and 8

October 26, 1936:

255-4. The Board of Directors unanimously ratified and confirmed the informal action taken October 24, 1936, ap-

COMPLAINANTS' EXHIBIT No. 957

proving Water Control Bulletin #3, a true copy of which, labeled Exhibit 10-26-36b, is filed with the records of the Authority.

March 12, 1937:

275-3. The Board unanimously approved Water Control Bulletin #4, a true copy of which, labeled Exhibit 3-12-37b, was ordered filed with the records of the Authority.

March 31, 1937:

279-3. The Board unanimously approved Water Control Bulletins #5 and #6, true copies of which, labeled Exhibit 3-31-37a, were ordered filed with the Authority's records.

Minutes of May 5, 1937:

282-35. The Board unanimously approved Water Control Bulletin #7 and ordered a true copy filed with the records of the Authority as Exhibit 5-5-37z.

[fol. 4062] Minutes of June 3, 1937:

285-26. The Board unanimously approved Water Control Bulletin #8, a true copy of which, labeled Exhibit 6-3-37s, is filed with the records of the Authority.